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EMPLOYMENT-UNEMPLOYMENT

HEARINGS

BEFORE THE

JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

ONE HUNDREDTH CONGRESS

FIRST SESSION

PART 30

NOVEMBER 6 AND DECEMBER 4, 1987, AND
JANUARY 8, 1988

Printed for the use of the Joint Economic Committee

U.S. GOVERNMENT PRINTING OFFICE

90-688 WASHINGTON : 1989

For sale by the Superintendent of Documents, Congressional Sales Office
U.S. Government Printing Office, Washington, DC 20402

J841-3

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EMPLOYMENT-UNEMPLOYMENT

FRIDAY, NOVEMBER 6, 1987

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, DC.

The committee met, pursuant to notice, at 9:40 a.m., in room SD-628, Dirksen Senate Office Building, Hon. Paul S. Sarbanes (chairman of the committee) presiding.

Present: Senators Sarbanes and Melcher.

Also present: Judith Davison, executive director; and William Buechner and Chris Frenze, professional staff members.

OPENING STATEMENT OF SENATOR SARBANES, CHAIRMAN

Senator SARBANES. The committee will come to order.

The Joint Economic Committee is very pleased this morning to welcome once again Janet Norwood, the Commissioner of Labor Statistics, to testify on the employment and unemployment situation for October.

According to this morning's Employment Situation press release, the economy did create jobs at least through the first half of October, although the civilian unemployment rate rose to 6 percent.

The information we will review today, as I understand it, does not extend beyond the week of October 12 and therefore does not reflect any effects of the sharp downward movement in the world's stock markets that began on October 19.

I would like to turn to a slightly different subject for just a moment. In October, the Bureau of Labor Statistics released some data on the recent earnings of American families which I find of considerable concern.

In the real earnings release for September, which was issued on October 23, the BLS reported that the real average weekly earnings of private nonfarm workers declined during the last 12 months by almost 2 percent. Although the average worker took home 2.4 percent more in pay in September of 1987 than in September of 1986, prices rose 4.4 percent during the same period, leaving the average worker 2 percent worse off after adjusting for inflation.

Families seem to fare no better. According to the BLS's October 26 release on the employment and earnings characteristics of families, the median earnings of families rose 5 percent between the third quarter of 1986 and the third quarter of 1987. After adjusting for inflation, the gain, however, came to only 0.6 of 1 percent. Moreover, all of the gain occurred among two-earner families. After adjusting for inflation, families with a single earner suffered a 2.6 percent average loss of real income during the last year,

while families with two or more earners experienced an average gain of 1 percent. That is a real gain of 1 percent in families with two or more earners but a loss of over 2.5 percent in families with a single earner.

The loss in real family income for one-earner families is not attributable to households maintained by a single woman; the largest losses were experienced by married couple families with one earner, as well as for families maintained by single men.

Notwithstanding the unemployment figures, the household income figures indicate that having a job is no longer enough to assure a family's welfare; the American dream of supporting oneself and one's family by working hard at a decent job paying a decent wage has grown more problematical.

The BLS's data suggest that most families cannot make ends meet today without having at least two family members in the labor force who are contributing to the family budget.

We will now ask Commissioner Norwood to present her testimony on the employment and unemployment situation for October.

Senator Melcher, did you have anything?

Senator MELCHER. No.

Senator SARBANES. Commissioner, we would be pleased to hear from you.

STATEMENT OF HON. JANET L. NORWOOD, COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY KENNETH V. DALTON, ASSOCIATE COMMISSIONER, OFFICE OF PRICES AND LIVING CONDITIONS; AND THOMAS J. PLEWES, ASSOCIATE COMMISSIONER, OFFICE OF EMPLOYMENT AND UNEMPLOYMENT STATISTICS

Mrs. NORWOOD. Thank you very much.

I have with me as always our price expert Kenneth Dalton and our employment and unemployment expert Tom Plewes.

Senator SARBANES. We are pleased to welcome your gang here with you, Commissioner.

Mrs. NORWOOD. Thank you, Mr. Chairman. [Laughter.]

We are not a gang of four, but, we are really pleased to be here.

The labor market continued strong in October. Large gains in employment occurred in both the household and business surveys. The labor force also expanded considerably, leaving unemployment essentially unchanged. The overall jobless rate was 5.9 percent, and the civilian worker rate was 6 percent.

After 2 months of small increases, the number of workers on business payrolls during the period October 11–17 totaled 102.9 million, up sharply—550,000—from September.

An especially bright spot is the factory work force, which continued to expand; 65,000 jobs were added in October. In fact, factory employment has risen by 220,000 since June.

For the second month in a row, the BLS diffusion index, which is heavily weighted toward manufacturing, showed increased employment in more than 60 percent of the industries included. Large over-the-month job gains occurred in fabricated metal products, machinery, and electrical equipment, and small increases were posted by several other manufacturing industries.

Indeed, October employment in three manufacturing industries—furniture, rubber and plastics, and printing and publishing—reached an all-time high.

In addition to these employment gains, the factory workweek rose to 41.1 hours in October, more than recouping the September drop caused by the Labor Day holiday. Factory overtime, at 4 hours, was at the highest level in more than 14 years.

Employment in the contruction industry increased by 40,000 after seasonal adjustment, recouping the job loss of September. At 5 million, construction employment has shown no growth since last spring.

Employment in the services industry rose by 150,000 in October. The industry has gained nearly 900,000 jobs this year alone. Gains in October were especially large in business, health, and private educational services.

Employment in local government, always difficult to measure at this time of the year, increased by 165,000. Although much of this increase reflects the return to work of teachers and other school personnel who had been on strike in September, school systems also continued to hire for larger enrollments in the fall school term.

Civilian employment, as measured by the household survey, also rose sharply. Adult women accounted for much of that increase. The employment-population ratio edged up. Over the past year civilian employment has expanded by 3 million. The increase was shared equally by men and women.

As often occurs, the large employment increase from September to October was accompanied by an unusually large gain in the labor force. During the past year, the labor force has expanded by 2 million, including 1.1 million adult women and 850,000 adult men.

Although little changed from the September figures, jobless rates for blacks and whites both showed improvement from year-earlier levels. The proportion of blacks with jobs increased by more than 2 full percentage points over the year, considerably more than the 0.8 percent increase for whites. Nevertheless, the black unemployment rate remains more than twice the rate for whites.

In October, the current expansion reached 59 months, the longest peacetime expansion on record. During this period, employment has risen by 14 million, the number of unemployed persons has declined by nearly 5 million, and the civilian unemployment rate has fallen from 10.8 to 6 percent.

In summary, job growth from September to October was strong and widespread, and the labor force expanded. There were large gains in the services sector, continued strength in manufacturing employment, and an increase in factory hours.

Mr. Chairman, I would like to take just a few moments to review very briefly the data that we released in the last week on export and import prices and productivity. I think they are rather important.

There has been a moderation in the rise in import prices. From June to September, import prices were up just 1.7 percent and, more important, only 1.3 percent if fuels were excluded. In contrast, over the past 2 years, roughly paralleling the period when

the dollar has fallen, the price of imports excluding fuels has risen at an average quarterly rate of 2.1 percent.

One should bear in mind, of course, that during the third quarter the dollar was relatively stable. We have found, by using our new BLS-constructed exchange rate indexes weighted by product group, that foreign sellers, on average, have passed through as price increases only about one-half of the decline of the dollar.

Export prices were fairly stable during the third quarter. Prices for finished goods showed little movement, although prices for raw materials recorded their third substantial increase. These developments, which may reflect a desire by American manufacturers to increase export sales, seem consistent with the increases in factory employment over the last few months.

Domestic prices showed little evidence of significant upward movement because of import prices. Consumer prices for commodities other than food, shelter, and energy increased at a 5 percent, roughly, annual rate in the first 3 months of 1987, but in the second and third quarters that increase slowed to 3.8 and 3 percent, respectivel

On Monday, the Bureau released its quarterly release on productivity. In the third quarter, output per hour of all persons increased strongly—by almost 3 percent in the business and nonfarm business sector and by over 4 percent in manufacturing.

In view of the sluggish productivity growth in the business sector earlier in the recovery, the increases over the last three quarters are especially important.

Productivity growth during the current recovery differs considerably from that in past recoveries. Manufacturing productivity gains have been more rapid, but gains have been slower than usual in the business and nonfarm business sectors.

During the current expansion, hourly compensation increases in manufacturing have been more moderate than usual, and unit labor costs have actually declined, thereby exerting less upward pressure on prices.

We would be glad to try to answer any questions you may have.

[The table attached to Mrs. Norwood's statement, together with the Employment Situation press release, follows:]

Unemployment rates of all civilian workers by alternative seasonal adjustment methods

Month and year	Unadjusted rate	X-11 ARIMA method							X-11 method (official method before 1980)	Range (cols. 2-9)
		Official procedure	Concurrent (as first computed)	Concurrent (revised)	Stable	Total	Residual	12-month extrapolation		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1986										
October.....	6.6	6.9	6.9	7.0	7.0	6.9	6.9	7.0	7.0	.1
November....	6.6	6.9	6.9	7.0	6.9	6.9	7.0	6.9	7.0	.1
December....	6.3	6.7	6.7	6.7	6.6	6.7	6.7	6.7	6.7	.1
1987										
January.....	7.3	6.7	6.7	6.7	6.7	6.8	6.6	6.7	6.7	.2
February....	7.2	6.7	6.7	6.6	6.6	6.7	6.5	6.7	6.7	.2
March.....	6.9	6.6	6.6	6.5	6.6	6.6	6.5	6.6	6.6	.1
April.....	6.2	6.3	6.3	6.3	6.4	6.3	6.3	6.3	6.3	.1
May.....	6.1	6.3	6.3	6.3	6.4	6.3	6.4	6.3	6.3	.1
June.....	6.3	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	-
July.....	6.1	6.0	6.1	6.0	6.0	6.0	6.0	6.0	6.0	.1
August.....	5.8	6.0	6.0	6.0	5.9	6.1	6.2	6.0	6.0	.3
September...	5.7	5.9	5.9	5.9	5.9	5.9	6.0	5.9	5.9	.1
October.....	5.7	6.0	6.0	6.0	6.0	5.9	6.0	6.0	6.0	.1

SOURCE: U.S. DEPARTMENT OF LABOR
Bureau of Labor Statistics
November 1987

(1) Unadjusted rate. Unemployment rate for all civilian workers, not seasonally adjusted.

(2) Official procedure (X-11 ARIMA method). The published seasonally adjusted rate for all civilian workers. Each of the 3 major civilian labor force components--agricultural employment, nonagricultural employment and unemployment--for 4 age-sex groups--males and females, ages 16-19 and 20 years and over--are seasonally adjusted independently using data from January 1974 forward. The data series for each of these 12 components are extended by a year at each end of the original series using ARIMA (Auto-Regressive, Integrated, Moving Average) models chosen specifically for each series. Each extended series is then seasonally adjusted with the X-11 portion of the X-11 ARIMA program. The 4 teenage unemployment and nonagricultural employment components are adjusted with the additive adjustment model, while the other components are adjusted with the multiplicative model. The unemployment rate is computed by summing the 4 seasonally adjusted unemployment components and calculating that total as a percent of the civilian labor force total derived by summing all 12 seasonally adjusted components. All the seasonally adjusted series are revised at the end of each year. Extrapolated factors for January-June are computed at the beginning of each year; extrapolated factors for July-December are computed in the middle of the year after the June data become available. Each set of 6-month factors are published in advance, in the January and July issues, respectively, of Employment and Earnings.

(3) Concurrent (as first computed, X-11 ARIMA method). The official procedure for computation of the rate for all civilian workers using the 12 components is followed except that extrapolated factors are not used at all. Each component is seasonally adjusted with the X-11 ARIMA program each month as the most recent data become available. Rates for each month of the current year are shown as first computed; they are revised only once each year, at the end of the year when data for the full year become available. For example, the rate for January 1984 would be based, during 1984, on the adjustment of data from the period January 1974 through January 1984.

(4) Concurrent (revised, X-11 ARIMA method). The procedure used is identical to (3) above, and the rate for the current month (the last month displayed) will always be the same in the two columns. However, all previous months are subject to revision each month based on the seasonal adjustment of all the components with data through the current month.

(5) Stable (X-11 ARIMA method). Each of the 12 civilian labor force components is extended using ARIMA models as in the official procedure and then run through the X-11 part of the program using the stable option. This option assumes that seasonal patterns are basically constant from year-to-year and computes final seasonal factors as unweighted averages of all the seasonal-irregular components for each month across the entire span of the period adjusted. As in the official procedure, factors are extrapolated in 6-month intervals and the series are revised at the end of each year. The procedure for computation of the rate from the seasonally adjusted components is also identical to the official procedure.

(6) Total (X-11 ARIMA method). This is one alternative aggregation procedure, in which total unemployment and civilian labor force levels are extended with ARIMA models and directly adjusted with multiplicative adjustment models in the X-11 part of the program. The rate is computed by taking seasonally adjusted total unemployment as a percent of seasonally adjusted total civilian labor force. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(7) Residual (X-11 ARIMA method). This is another alternative aggregation method, in which total civilian employment and civilian labor force levels are extended using ARIMA models and then directly adjusted with multiplicative adjustment models. The seasonally adjusted unemployment level is derived by subtracting seasonally adjusted employment from seasonally adjusted labor force. The rate is then computed by taking the derived unemployment level as a percent of the labor force level. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(8) 12-month extrapolation (X-11 ARIMA method). This approach is the same as the official procedure except that the factors are extrapolated in 12-month intervals. The factors for January-December of the current year are computed at the beginning of the year based on data through the preceding year. The values for January through June of the current year are the same as the official values since they reflect the same factors.

(9) X-11 method (official method before 1980). The method for computation of the official procedure is used except that the series are not extended with ARIMA models and the factors are projected in 12-month intervals. The standard X-11 program is used to perform the seasonal adjustment.

Methods of Adjustment: The X-11 ARIMA method was developed at Statistics Canada by the Seasonal Adjustment and Times Series Staff under the direction of Estela Bee Dagum. The method is described in The X-11 ARIMA Seasonal Adjustment Method, by Estela Bee Dagum, Statistics Canada Catalogue No. 12-564E, February 1980.

The standard X-11 method is described in X-11 Variant of the Census Method II Seasonal Adjustment Program, by Julius Shiskin, Allan Young and John Musgrave (Technical Paper No. 15, Bureau of the Census, 1967).

News
United States Department of Labor
Bureau of Labor Statistics Washington, D.C. 20212

Technical information: (202) 523-1371
523-1944
523-1959
Media contact: 523-1913

USDL 87-491

TRANSMISSION OF MATERIAL IN THIS RELEASE IS EMBARGOED UNTIL 8:30 A.M. (EST), FRIDAY, NOVEMBER 6, 1987

THE EMPLOYMENT SITUATION: OCTOBER 1987

Employment was up sharply in October while unemployment was essentially unchanged, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. The overall unemployment rate, 5.9 percent, and the rate for civilian workers, 6.0 percent, were about the same as in September.

The number of nonagricultural payroll jobs, as measured by the survey of business establishments, rose by 550,000, following moderate increases in the previous 2 months. Total civilian employment, as measured by the survey of households, posted a gain of more than 400,000. (The reference period for both surveys was the week of October 11-17.)

Unemployment (Household Survey Data)

Both the number of unemployed persons, at 7.2 million in October, and the civilian unemployment rate, at 6.0 percent, were about unchanged from September, as the increase in employment was matched by a large gain in the labor force.

Jobless rates for adult men (5.1 percent), adult women (5.2 percent), whites (5.2 percent), blacks (12.0 percent), and Hispanics (8.3 percent) showed little or no movement over the month, but have declined considerably over the year. In contrast, the teenage rate has risen 2 percentage points since midsummer and, at 17.4 percent in October, was about the same as a year earlier. (See tables A-2 and A-3.)

The average (mean) duration of unemployment, at 14.0 weeks, was about unchanged in October. At 6.2 weeks, median duration was up slightly over the month, but was still below the levels registered prior to September. (See table A-7.)

Civilian Employment and the Labor Force (Household Survey Data)

Civilian employment, which had declined in September, rose by 415,000 in October to 113.2 million, after seasonal adjustment. Over the past 12 months, employment has grown by 3.0 million, with adult women accounting for 1.5 million of the gain, adult men 1.4 million, and teenagers 120,000. (See table A-2.)

The civilian labor force rebounded by 500,000 in October, reaching a seasonally adjusted level of 120.4 million. The proportion of the population in the labor force edged up slightly to 65.7 percent, matching the peak ratio reached in May and August. Since October 1986, increases in the labor force have totalled 2.0 million.

Table A. Major indicators of labor market activity, seasonally adjusted

Category	Quarterly averages		Monthly data			Sept.-Oct. change
	1987		1987			
	II	III	Aug.	Sept.	Oct.	
HOUSEHOLD DATA						
	Thousands of persons					
Labor force 1/.....	121,341	121,771	122,038	121,604	122,102	498
Total employment 1/..	113,906	114,593	114,817	114,515	114,928	413
Civilian labor force...	119,615	120,038	120,302	119,861	120,361	500
Civilian employment..	112,180	112,860	113,081	112,772	113,187	415
Unemployment.....	7,435	7,178	7,221	7,089	7,174	85
Not in labor force.....	62,912	62,978	62,700	63,300	62,950	-350
Discouraged workers..	1,037	1,011	N.A.	N.A.	N.A.	N.A.
	Percent of labor force					
Unemployment rates:						
All workers 1/.....	6.1	5.9	5.9	5.8	5.9	0.1
All civilian workers.	6.2	6.0	6.0	5.9	6.0	.1
Adult men.....	5.5	5.2	5.2	5.0	5.1	.1
Adult women.....	5.4	5.4	5.3	5.4	5.2	-.2
Teenagers.....	17.0	15.9	16.0	16.3	17.4	1.1
White.....	5.3	5.1	5.1	5.1	5.2	.1
Black.....	13.2	12.4	12.4	12.3	12.0	-.3
Hispanic origin....	8.8	8.0	8.0	8.2	8.3	.1
ESTABLISHMENT DATA						
	Thousands of jobs					
Nonfarm employment.....	101,708	p102,266	102,275	p102,396	p102,945	p549
Goods-producing.....	24,757	p24,882	24,886	p24,910	p25,018	p108
Service-producing....	76,951	p77,384	77,389	p77,486	p77,927	p441
	Hours of work					
Average weekly hours:						
Total private.....	34.8	p34.8	34.9	p34.6	p34.8	p0.2
Manufacturing.....	40.9	p40.8	41.0	p40.4	p41.1	p.7
Overtime.....	3.7	p3.7	3.8	p3.6	p4.0	p.4

1/ Includes the resident Armed Forces. N.A.=not available.
p=preliminary.

Industry Payroll Employment (Establishment Survey Data)

Total nonagricultural employment rose by 550,000 in October, seasonally adjusted, to a level of 102.9 million. For the second month in a row, increases occurred in more than three-fifths of the 185 industries in the BLS index of diffusion. Over the past 12 months, payroll employment has grown by 2.8 million. (See tables B-1 and B-6.)

In the goods-producing sector, employment rose by 110,000 in October, with factory jobs increasing by 65,000 and reaching 19.2 million. Since June, factory employment has expanded by 220,000. Most of the October improvement occurred in durable goods industries, with sizable gains in electrical equipment, machinery, and fabricated metal products. The number of construction jobs rose by 40,000, following a 30,000 decline in September, and mining employment continued to edge upward.

In the service-producing sector, employment rose sharply in October, after showing only moderate increases in September. The largest increases were in the services industry (150,000) and in local government (165,000), the latter due partly to the return to the payroll of about 65,000 teachers and other school personnel after labor disputes. Retail trade employment increased by about 70,000, following a 60,000 advance in September. In contrast, employment in wholesale trade; in finance, insurance, and real estate; and in transportation and public utilities was essentially unchanged in October. Altogether, jobs in the service sector increased by 440,000.

Weekly Hours (Establishment Survey Data)

Reversing the Labor Day-related curtailment in hours in September, the average workweek of production or nonsupervisory workers on private nonagricultural payrolls rose 0.2 hour in October, after seasonal adjustment, reaching 34.8 hours. The manufacturing workweek, at 41.1 hours, also rebounded, and factory overtime rose to 4.0 hours, the highest level in 14 years. (See table B-2.)

Reflecting increases in both employment and the average workweek, the index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls rose 1.1 percent to 121.5 (1977=100) seasonally adjusted. The manufacturing index rose 2.0 percent to 94.7. (See table B-5.)

Hourly and Weekly Earnings (Establishment Survey Data)

Average hourly earnings rose by 0.7 percent in October, while average weekly earnings increased by 1.2 percent, seasonally adjusted. Before seasonal adjustment, average hourly earnings rose by 3 cents to $9.08, and average weekly earnings were up $2.85 to $316.89. Over the past 12 months, hourly earnings have risen 26 cents and weekly earnings have increased $10.84. (See table B-3.)

The Hourly Earnings Index (Establishment Survey Data)

The Hourly Earnings Index (HEI) was 174.6 (1977=100) in October, seasonally adjusted, an increase of 0.1 percent from September. For the 12 months ended in October, the increase was 2.6 percent. The HEI excludes the effects of two types of changes unrelated to underlying wage rate movements--fluctuations in manufacturing overtime and interindustry employment shifts. In dollars of constant purchasing power, the HEI decreased 1.5 percent during the 12-month period ending in September. (See table B-4.)

The Employment Situation for November 1987 will be released on Friday, December 4, at 8:30 A.M. (EST).

Explanatory Note

This news release presents statistics from two major surveys, the Current Population Survey (household survey) and the Current Employment Statistics Survey (establishment survey). The household survey provides the information on the labor force, total employment, and unemployment that appears in the A tables, marked HOUSEHOLD DATA. It is a sample survey of about 59,500 households that is conducted by the Bureau of the Census with most of the findings analyzed and published by the Bureau of Labor Statistics (BLS).

The establishment survey provides the information on the employment, hours, and earnings of workers on nonagricultural payrolls that appears in the B tables, marked ESTABLISHMENT DATA. This information is collected from payroll records by BLS in cooperation with State agencies. The sample includes over 290,000 establishments employing over 38 million people.

For both surveys, the data for a given month are actually collected for and relate to a particular week. In the household survey, unless otherwise indicated, it is the calendar week that contains the 12th day of the month, which is called the survey week. In the establishment survey, the reference week is the pay period including the 12th, which may or may not correspond directly to the calendar week.

The data in this release are affected by a number of technical factors, including definitions, survey differences, seasonal adjustments, and the inevitable variance in results between a survey of a sample and a census of the entire population. Each of these factors is explained below.

Coverage, definitions, and differences between surveys

The sample households in the household survey are selected so as to reflect the entire civilian noninstitutional population 16 years of age and older. Each person in a household is classified as employed, unemployed, or not in the labor force. Those who hold more than one job are classified according to the job at which they worked the most hours.

People are classified as *employed* if they did any work at all as paid civilians; worked in their own business or profession or on their own farm; or worked 15 hours or more in an enterprise operated by a member of their family, whether they were paid or not. People are also counted as employed if they were on unpaid leave because of illness, bad weather, disputes between labor and management, or personal reasons. Members of the Armed Forces stationed in the United States are also included in the employed total.

People are classified as *unemployed*, regardless of their eligibility for unemployment benefits or public assistance, if they meet all of the following criteria: They had no employment during the survey week; they were available for work at that time; and they made specific efforts to find employment sometime during the prior 4 weeks. Persons laid off from their former jobs and awaiting recall and those expecting to report to a job within 30 days need not be looking for work to be counted as unemployed.

The *labor force* equals the sum of the number employed and the number unemployed. The *unemployment rate* is the percentage of unemployed people in the labor force (civilian plus the resident Armed Forces). Table A-5 presents a special grouping of seven measures of unemployment based on varying definitions of unemployment and the labor force. The definitions are provided in the table. The most restrictive definition yields U-1 and the most comprehensive yields U-7. The overall unemployment rate is U-5a, while U-5b represents the same measure with a civilian labor force base.

Unlike the household survey, the establishment survey only counts wage and salary employees whose names appear on the payroll records of nonagricultural firms. As a result, there are many differences between the two surveys, among which are the following:

— The household survey, although based on a smaller sample, reflects a larger segment of the population; the establishment survey excludes agriculture, the self-employed, unpaid family workers, private household workers, and members of the resident Armed Forces;

— The household survey includes people on unpaid leave among the employed; the establishment survey does not;

— The household survey is limited to those 16 years of age and older; the establishment survey is not limited by age;

— The household survey has no duplication of individuals, because each individual is counted only once; in the establishment survey, employees working at more than one job or otherwise appearing on more than one payroll would be counted separately for each appearance.

Other differences between the two surveys are described in "Comparing Employment Estimates from Household and Payroll Surveys," which may be obtained from the BLS upon request.

Seasonal adjustment

Over the course of a year, the size of the Nation's labor force and the levels of employment and unemployment undergo sharp fluctuations due to such seasonal events as changes in weather, reduced or expanded production, harvests, major holidays, and the opening and closing of schools. For example, the labor force increases by a large number each June, when schools close and many young people enter the job market. The effect of such seasonal variation can be very large; over the course of a year, for example, seasonality may account for as much as 95 percent of the month-to-month changes in unemployment.

Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make nonseasonal developments, such as declines in economic activity or increases in the participation of women in the labor force, easier to spot. To return to the school's-out example, the large number of people entering the labor force each June is likely to obscure any other changes that have taken place since May, making it difficult to determine if the level of economic activity has risen or declined. However, because the effect of students finishing school in previous years is known, the statistics for the current year can be adjusted to allow for a comparable change. Insofar as the seasonal adjustment is made correctly, the adjusted figure provides a more useful tool with which to analyze changes in economic activity.

Measures of labor force, employment, and unemployment contain components such as age and sex. Statistics for all employees, production workers, average weekly hours, and average hourly earnings include components based on the employer's industry. All these statistics can be seasonally adjusted either by adjusting the total or by adjusting each of the components and combining them. The second procedure usually yields more accurate information and is therefore followed by BLS. For example, the seasonally adjusted figure for the labor force is the sum of eight seasonally adjusted civilian employment components, plus the resident Armed Forces total (not adjusted for seasonality), and four seasonally adjusted unemployment components; the total for unemployment is the sum of the four unemployment components; and the overall unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the labor force.

The numerical factors used to make the seasonal adjustments are recalculated regularly. For the household survey, the factors are calculated for the January-June period and again for the July-December period. The January revision is applied to data that have been published over the previous 5 years. For the establishment survey, updated factors for seasonal adjustment are calculated only once a year, along with the introduction of new benchmarks which are discussed at the end of the next section.

Sampling variability

Statistics based on the household and establishment surveys are subject to sampling error, that is, the estimate of the number of people employed and the other estimates drawn from these surveys probably differ from the figures that would be obtained from a complete census, even if the same questionnaires and procedures were used. In the household survey, the amount of the differences can be expressed in terms of standard errors. The numerical value of a standard error depends upon the size of the sample, the results of the survey, and other factors. However, the numerical value is always such that the chances are approximately 68 out of 100 that an estimate based on the sample will differ by no more than the standard error from the results of a complete census. The chances are approximately 90 out of 100 that an estimate based on the sample will differ by no more than 1.6 times the standard error from the results of a complete census. At approximately the 90-percent level of confidence—the confidence limits used by BLS in its analyses—the error for the monthly change in total employment is on the order of plus or minus 328,000; for total unemployment it is 220,000; and, for the overall unemployment rate, it is 0.19 percentage point. These figures do not mean that the sample results are off by these magnitudes but, rather, that the chances are approximately 90 out of 100 that the "true" level or rate would not be expected to differ from the estimates by more than these amounts.

Sampling errors for monthly surveys are reduced when the data are cumulated for several months, such as quarterly or annually. Also, as a general rule, the smaller the estimate, the larger the sampling error. Therefore, relatively speaking, the estimate of the size of the labor force is subject to less error than is the estimate of the number unemployed. And, among the unemployed, the sampling error for the jobless rate of adult men, for example, is much smaller than is the error for the jobless rate of teenagers. Specifically, the error on monthly change in the jobless rate for men is .26 percentage point; for teenagers, it is 1.25 percentage points.

In the establishment survey, estimates for the 2 most current months are based on incomplete returns; for this reason, these estimates are labeled preliminary in the tables. When all the returns in the sample have been received, the estimates are revised. In other words, data for the month of September are published in preliminary form in October and November and in final form in December. To remove errors that build up over time, a comprehensive count of the employed is conducted each year. The results of this survey are used to establish new benchmarks—comprehensive counts of employment—against which month-to-month changes can be measured. The new benchmarks also incorporate changes in the classification of industries and allow for the formation of new establishments.

Additional statistics and other information

In order to provide a broad view of the Nation's employment situation, BLS regularly publishes a wide variety of data in this news release. More comprehensive statistics are contained in *Employment and Earnings*, published each month by BLS. It is available for $8.50 per issue or $22.00 per year from the U.S. Government Printing Office, Washington, D.C., 20204. A check or money order made out to the Superintendent of Documents must accompany all orders.

Employment and Earnings also provides approximations of the standard errors for the household survey data published in this release. For unemployment and other labor force categories, the standard errors appear in tables B through J of its "Explanatory Notes." Measures of the reliability of the data drawn from the establishment survey and the actual amounts of revision due to benchmark adjustments are provided in tables M, O, P, and Q of that publication.

HOUSEHOLD DATA

Table A-1. Employment status of the population, including Armed Forces in the United States, by sex

(Numbers in thousands)

Employment status and sex	Not seasonally adjusted			Seasonally adjusted[1]					
	Oct. 1986	Sept. 1987	Oct. 1987	Oct. 1986	June 1987	July 1987	Aug. 1987	Sept. 1987	Oct. 1987
TOTAL									
Noninstitutional population[2]	182,935	184,904	185,052	182,935	184,421	184,605	184,738	184,904	185,052
Labor force[3]	120,448	121,627	122,485	120,163	121,235	121,672	122,038	121,604	122,102
Participation rate[4]	65.8	65.8	66.2	65.7	65.7	65.9	66.1	65.8	66.0
Total employed[5]	112,606	114,770	115,639	111,941	113,975	114,447	114,517	114,515	114,928
Employment-population ratio[6]	61.6	62.1	62.5	61.2	61.8	62.0	62.2	61.9	62.1
Resident Armed Forces	1,749	1,743	1,741	1,749	1,718	1,720	1,736	1,743	1,741
Civilian employed	110,857	113,027	113,898	110,192	112,257	112,727	113,081	112,772	113,187
Agriculture	3,190	3,277	3,297	3,162	3,178	3,219	3,092	3,170	3,283
Nonagricultural industries	107,666	109,750	110,601	107,030	109,079	109,508	109,989	109,602	109,903
Unemployed	7,842	6,857	6,845	8,222	7,260	7,224	7,221	7,089	7,174
Unemployment rate[7]	6.5	5.6	5.6	6.8	6.0	5.9	5.9	5.8	5.9
Not in labor force	62,487	63,277	62,567	62,772	63,187	62,933	62,700	63,300	62,950
Men, 16 years and over									
Noninstitutional population[2]	87,682	88,683	88,756	87,682	88,442	88,534	88,598	88,683	88,756
Labor force[3]	66,948	67,639	67,820	67,130	67,556	67,656	67,925	67,736	67,916
Participation rate[4]	76.4	76.3	76.4	76.6	76.4	76.4	76.7	76.4	76.5
Total employed[5]	62,790	64,203	64,272	62,565	63,471	63,715	63,918	63,939	64,024
Employment-population ratio[6]	71.6	72.4	72.4	71.4	71.8	72.0	72.1	72.1	72.1
Resident Armed Forces	1,590	1,581	1,580	1,590	1,559	1,561	1,575	1,581	1,580
Civilian employed	61,200	62,622	62,692	60,975	61,912	62,154	62,343	62,358	62,444
Unemployed	4,159	3,437	3,549	4,565	4,085	3,941	4,007	3,798	3,893
Unemployment rate[7]	6.2	5.1	5.2	6.8	6.0	5.8	5.9	5.6	5.7
Women, 16 years and over									
Noninstitutional population[2]	95,253	96,221	96,295	95,253	95,979	96,071	96,140	96,221	96,295
Labor force[3]	53,500	53,987	54,664	53,033	53,679	54,016	54,113	53,868	54,185
Participation rate[4]	56.2	56.1	56.8	55.7	55.9	56.2	56.3	56.0	56.3
Total employed[5]	49,816	50,567	51,367	49,376	50,504	50,733	50,899	50,576	50,904
Employment-population ratio[6]	52.3	52.6	53.3	51.8	52.6	52.8	52.9	52.6	52.9
Resident Armed Forces	159	162	161	159	159	159	161	162	161
Civilian employed	49,657	50,405	51,206	49,217	50,345	50,574	50,738	50,414	50,743
Unemployed	3,683	3,420	3,297	3,657	3,175	3,283	3,213	3,291	3,281
Unemployment rate[7]	6.9	6.3	6.0	6.9	5.9	6.1	5.9	6.1	6.1

[1] The population and Armed Forces figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

[2] Includes members of the Armed Forces stationed in the United States.

[3] Labor force as a percent of the noninstitutional population.

[4] Total employment as a percent of the noninstitutional population.

[5] Unemployment as a percent of the labor force (including the resident Armed Forces).

HOUSEHOLD DATA

Table A-2. Employment status of the civilian population by sex and age

(Numbers in thousands)

Employment status, sex, and age	Not seasonally adjusted			Seasonally adjusted[1]					
	Oct. 1986	Sept. 1987	Oct. 1987	Oct. 1986	June 1987	July 1987	Aug. 1987	Sept. 1987	Oct. 1987
TOTAL									
Civilian noninstitutional population	181,186	183,161	183,311	181,186	182,703	182,885	183,002	183,161	183,311
Civilian labor force	118,699	119,884	120,744	118,414	119,517	119,952	120,302	119,861	120,361
Participation rate	65.5	65.5	65.9	65.4	65.4	65.6	65.7	65.4	65.7
Employed	110,857	113,027	113,898	110,192	112,257	112,727	113,081	112,772	113,187
Employment-population ratio[2]	61.2	61.7	62.1	60.8	61.4	61.6	61.8	61.6	61.7
Unemployed	7,842	6,857	6,845	8,222	7,260	7,224	7,221	7,089	7,174
Unemployment rate	6.6	5.7	5.7	6.9	6.1	6.0	6.0	5.9	6.0
Men, 20 years and over									
Civilian noninstitutional population	78,802	79,740	79,807	78,802	79,536	79,625	79,668	79,740	79,807
Civilian labor force	61,471	62,157	62,317	61,409	62,057	62,116	62,053	62,045	62,160
Participation rate	78.0	77.9	78.1	77.9	78.0	78.0	77.9	77.8	77.9
Employed	58,015	59,373	59,442	57,595	58,620	58,793	58,818	58,957	58,997
Employment-population ratio[2]	73.6	74.5	74.5	73.1	73.7	73.8	73.8	73.9	73.9
Agriculture	2,357	2,433	2,403	2,297	2,307	2,343	2,254	2,355	2,354
Nonagricultural industries	55,658	56,941	57,040	55,298	56,313	56,450	56,564	56,601	56,643
Unemployed	3,456	2,783	2,875	3,814	3,437	3,323	3,235	3,089	3,163
Unemployment rate	5.6	4.5	4.6	6.2	5.5	5.4	5.2	5.0	5.1
Women, 20 years and over									
Civilian noninstitutional population	87,856	88,785	88,843	87,856	88,546	88,632	88,685	88,785	88,843
Civilian labor force	49,629	50,182	50,721	49,014	49,714	49,971	49,989	49,882	50,098
Participation rate	56.5	56.5	57.1	55.8	56.1	56.4	56.4	56.2	56.4
Employed	46,585	47,349	48,076	46,020	47,126	47,288	47,324	47,179	47,493
Employment-population ratio[2]	53.0	53.3	54.1	52.4	53.2	53.4	53.4	53.1	53.5
Agriculture	628	615	670	612	615	619	603	585	648
Nonagricultural industries	45,957	46,734	47,407	45,408	46,512	46,669	46,722	46,594	46,845
Unemployed	3,044	2,833	2,644	2,994	2,588	2,683	2,664	2,703	2,605
Unemployment rate	6.1	5.6	5.2	6.1	5.2	5.4	5.3	5.4	5.2
Both sexes, 16 to 19 years									
Civilian noninstitutional population	14,527	14,637	14,661	14,527	14,621	14,628	14,649	14,637	14,661
Civilian labor force	7,598	7,545	7,706	7,991	7,746	7,865	8,260	7,933	8,103
Participation rate	52.3	51.5	52.6	55.0	53.0	53.8	56.4	54.2	55.3
Employed	6,257	6,305	6,379	6,577	6,511	6,647	6,939	6,636	6,697
Employment-population ratio[2]	43.1	43.1	43.5	45.3	44.5	45.4	47.4	45.3	45.7
Agriculture	205	229	225	253	257	258	236	230	282
Nonagricultural industries	6,052	6,076	6,155	6,324	6,254	6,389	6,703	6,406	6,415
Unemployed	1,341	1,240	1,327	1,414	1,235	1,218	1,321	1,297	1,406
Unemployment rate	17.7	16.4	17.2	17.7	15.9	15.5	16.0	16.3	17.4

[1] The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

[2] Civilian employment as a percent of the civilian noninstitutional population.

Table A-3. Employment status of the civilian population by race, sex, age, and Hispanic origin

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	Not seasonally adjusted			Seasonally adjusted[1]					
	Oct. 1986	Sept. 1987	Oct. 1987	Oct. 1986	June 1987	July 1987	Aug. 1987	Sept. 1987	Oct. 1987
WHITE									
Civilian noninstitutional population	155,856	157,242	157,342	155,856	156,930	157,058	157,134	157,242	157,342
Civilian labor force	102,504	103,295	103,934	102,297	103,106	103,272	103,614	103,278	103,642
Participation rate	65.8	65.7	66.1	65.6	65.7	65.8	65.9	65.7	65.9
Employed	96,702	98,261	98,882	96,147	97,716	97,958	98,299	97,995	98,284
Employment-population ratio[2]	62.0	62.5	62.8	61.7	62.3	62.4	62.6	62.3	62.5
Unemployed	5,802	5,033	5,053	6,150	5,390	5,314	5,315	5,283	5,357
Unemployment rate	5.7	4.9	4.9	6.0	5.2	5.1	5.1	5.1	5.2
Men, 20 years and over									
Civilian labor force	53,741	54,236	54,399	53,757	54,213	54,214	54,164	54,152	54,367
Participation rate	78.3	78.3	78.4	78.3	78.4	78.3	78.2	78.1	78.4
Employed	51,157	52,133	52,167	50,845	51,581	51,682	51,714	51,771	51,856
Employment-population ratio[2]	74.6	75.2	75.2	74.1	74.6	74.7	74.7	74.7	74.8
Unemployed	2,584	2,103	2,232	2,912	2,632	2,532	2,449	2,382	2,511
Unemployment rate	4.8	3.9	4.1	5.4	4.9	4.7	4.5	4.4	4.6
Women, 20 years and over									
Civilian labor force	42,157	42,556	42,943	41,598	42,159	42,280	42,418	42,312	42,352
Participation rate	56.0	56.0	56.5	55.2	55.6	55.7	55.9	55.7	55.7
Employed	39,958	40,557	41,089	39,431	40,318	40,379	40,535	40,395	40,522
Employment-population ratio[2]	53.0	53.4	54.0	52.3	53.2	53.2	53.4	53.2	53.3
Unemployed	2,199	1,999	1,854	2,167	1,841	1,902	1,882	1,917	1,830
Unemployment rate	5.2	4.7	4.3	5.2	4.4	4.5	4.4	4.5	4.3
Both sexes, 16 to 19 years									
Civilian labor force	6,607	6,502	6,592	6,942	6,734	6,778	7,033	6,814	6,922
Participation rate	55.5	54.4	55.2	58.4	56.3	56.6	58.8	57.0	58.0
Employed	5,588	5,571	5,626	5,871	5,817	5,898	6,049	5,829	5,906
Employment-population ratio[2]	47.0	46.6	47.1	49.4	48.6	49.3	50.6	48.8	49.5
Unemployed	1,019	931	967	1,071	917	880	984	985	1,016
Unemployment rate	15.4	14.3	14.7	15.4	13.6	13.0	14.0	14.5	14.7
Men	15.5	14.5	14.8	15.7	14.5	13.0	15.4	15.3	15.0
Women	15.3	14.2	14.6	15.2	12.7	13.0	12.5	13.6	14.3
BLACK									
Civilian noninstitutional population	20,089	20,426	20,453	20,089	20,341	20,373	20,396	20,426	20,453
Civilian labor force	12,720	13,018	13,160	12,720	12,863	13,047	13,194	13,027	13,167
Participation rate	63.3	63.7	64.3	63.3	63.2	64.0	64.7	63.8	64.4
Employed	10,902	11,398	11,582	10,895	11,223	11,401	11,563	11,427	11,582
Employment-population ratio[2]	54.3	55.8	56.6	54.2	55.2	56.0	56.7	55.9	56.6
Unemployed	1,819	1,619	1,578	1,825	1,640	1,647	1,630	1,599	1,586
Unemployment rate	14.3	12.4	12.0	14.3	12.7	12.6	12.4	12.3	12.0
Men, 20 years and over									
Civilian labor force	5,940	6,039	6,019	5,932	6,001	6,089	6,079	6,025	6,012
Participation rate	74.7	74.6	74.3	74.6	74.5	75.4	75.2	74.4	74.2
Employed	5,177	5,463	5,451	5,153	5,311	5,404	5,431	5,425	5,435
Employment-population ratio[2]	65.1	67.5	67.3	64.8	65.9	66.9	67.2	67.0	67.1
Unemployed	763	576	569	779	690	686	647	600	577
Unemployment rate	12.8	9.5	9.5	13.1	11.5	11.3	10.7	10.0	9.6
Women, 20 years and over									
Civilian labor force	5,962	6,116	6,241	5,909	6,017	6,125	6,120	6,074	6,191
Participation rate	59.6	60.2	61.3	59.1	59.5	60.4	60.3	59.8	60.8
Employed	5,199	5,345	5,533	5,178	5,349	5,426	5,428	5,350	5,511
Employment-population ratio[2]	52.0	52.6	54.4	51.8	52.9	53.5	53.5	52.7	54.2
Unemployed	763	771	707	731	669	699	692	723	680
Unemployment rate	12.8	12.6	11.3	12.4	11.1	11.4	11.3	11.9	11.0
Both sexes, 16 to 19 years									
Civilian labor force	818	863	900	879	844	833	995	928	964
Participation rate	38.2	39.8	41.4	41.1	39.0	38.4	45.9	42.7	44.4
Employed	525	591	597	564	563	571	704	652	636
Employment-population ratio[2]	24.5	27.2	27.5	26.3	26.0	26.3	32.5	30.0	29.3
Unemployed	293	272	302	315	281	262	291	276	328
Unemployment rate	35.8	31.5	33.6	35.8	33.3	31.5	29.2	29.7	34.0
Men	38.8	32.9	32.5	37.8	31.5	31.5	32.6	30.9	32.2
Women	32.8	30.2	34.7	33.8	35.1	31.4	25.3	28.7	35.8
HISPANIC ORIGIN									
Civilian noninstitutional population	12,469	12,965	13,003	12,469	12,848	12,887	12,925	12,965	13,003
Civilian labor force	8,241	8,595	8,695	8,200	8,452	8,411	8,544	8,568	8,653
Participation rate	66.1	66.3	66.9	65.8	65.8	65.3	66.1	66.1	66.5
Employed	7,410	7,924	7,991	7,345	7,730	7,744	7,864	7,869	7,935
Employment-population ratio[2]	59.4	61.1	61.5	58.9	60.2	60.1	60.8	60.7	61.0
Unemployed	831	672	704	855	722	667	680	699	718
Unemployment rate	10.1	7.8	8.1	10.4	8.5	7.9	8.0	8.2	8.3

[1] The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

[2] Civilian employment as a percent of the civilian noninstitutional population.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented and Hispanics are included in both the white and black population groups.

HOUSEHOLD DATA

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Table A-4. Selected employment indicators

(In thousands)

Category	Not seasonally adjusted			Seasonally adjusted					
	Oct. 1986	Sept. 1987	Oct. 1987	Oct. 1986	June 1987	July 1987	Aug. 1987	Sept. 1987	Oct. 1987
CHARACTERISTIC									
Civilian employed, 16 years and over	110,857	113,027	113,898	110,192	112,257	112,727	113,081	112,772	113,187
Married men, spouse present	40,065	40,693	40,905	39,780	40,057	40,241	40,260	40,370	40,580
Married women, spouse present	27,986	28,324	28,685	27,323	28,458	28,426	28,196	27,988	28,013
Women who maintain families	5,971	6,084	6,174	6,016	5,939	6,013	6,108	6,164	6,205
MAJOR INDUSTRY AND CLASS OF WORKER									
Agriculture:									
Wage and salary workers	1,532	1,670	1,673	1,562	1,614	1,619	1,566	1,615	1,716
Self-employed workers	1,496	1,477	1,487	1,451	1,386	1,429	1,363	1,417	1,441
Unpaid family workers	163	130	136	164	165	154	159	134	136
Nonagricultural industries:									
Wage and salary workers	99,253	101,229	101,883	98,846	100,420	100,838	101,334	101,221	101,503
Government	16,470	16,864	17,288	16,264	16,956	16,931	16,760	16,915	17,083
Private industries	82,783	84,365	84,595	82,582	83,464	83,907	84,574	84,306	84,420
Private households	1,244	1,088	1,257	1,216	1,146	1,224	1,172	1,088	1,235
Other industries	81,539	83,277	83,338	81,366	82,318	82,683	83,402	83,218	83,185
Self-employed workers	8,148	8,217	8,478	7,993	8,328	8,205	8,216	8,184	8,320
Unpaid family workers	266	303	240	265	274	268	250	300	238
PERSONS AT WORK PART TIME[1]									
All industries:									
Part time for economic reasons	5,437	4,937	5,129	5,740	5,184	5,508	5,262	5,241	5,416
Slack work	2,443	2,070	2,346	2,481	2,317	2,456	2,515	2,212	2,389
Could only find part-time work	2,636	2,497	2,496	2,826	2,579	2,722	2,494	2,702	2,664
Voluntary part time	15,212	14,485	15,500	14,178	15,054	14,422	14,634	14,313	14,459
Nonagricultural industries:									
Part time for economic reasons	5,198	4,650	4,856	5,450	4,918	5,235	4,998	4,968	5,101
Slack work	2,273	1,899	2,162	2,314	2,155	2,295	2,306	2,038	2,211
Could only find part-time work	2,574	2,405	2,412	2,739	2,477	2,634	2,433	2,628	2,555
Voluntary part time	14,764	14,041	15,058	13,736	14,485	13,946	14,168	13,930	14,007

[1] Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial dispute.

Table A-5. Range of unemployment measures based on varying definitions of unemployment and the labor force, seasonally adjusted

(Percent)

Measure	Quarterly averages					Monthly data		
	1986		1987			1987		
	III	IV	I	II	III	Aug.	Sept.	Oct.
U-1 Persons unemployed 15 weeks or longer as a percent of the civilian labor force	1.9	1.8	1.8	1.7	1.6	1.6	1.6	1.5
U-2 Job losers as a percent of the civilian labor force	3.4	3.3	3.3	3.0	2.8	2.8	2.8	2.9
U-3 Unemployed persons 25 years and over as a percent of the civilian labor force	5.4	5.4	5.1	4.7	4.6	4.7	4.6	4.6
U-4 Unemployed full-time jobseekers as a percent of the full-time civilian labor force	6.6	6.5	6.3	5.9	5.6	5.6	5.4	5.5
U-5a Total unemployed as a percent of the labor force, including the resident Armed Forces	6.8	6.8	6.6	6.1	5.9	5.9	5.8	5.9
U-5b Total unemployed as a percent of the civilian labor force	6.9	6.9	6.7	6.2	6.0	6.0	5.9	6.0
U-6 Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/2 total on part time for economic reasons as a percent of the civilian labor force less 1/2 of the part-time labor force	9.3	9.2	9.0	8.4	8.2	8.2	8.0	8.2
U-7 Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/2 total on part time for economic reasons plus discouraged workers as a percent of the civilian labor force plus discouraged workers less 1/2 of the part-time labor force	10.2	10.2	10.0	9.3	9.0	N.A.	N.A.	N.A.

N.A. = not available.

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Table A-6. Selected unemployment indicators, seasonally adjusted

Category	Number of unemployed persons (in thousands)			Unemployment rates[1]					
	Oct. 1986	Sept. 1987	Oct. 1987	Oct. 1986	June 1987	July 1987	Aug. 1987	Sept. 1987	Oct. 1987
CHARACTERISTIC									
Total, 16 years and over	8,222	7,089	7,174	6.9	6.1	6.0	6.0	5.9	6.0
Men, 16 years and over	4,565	3,798	3,893	7.0	6.2	6.0	6.0	5.7	5.9
Men, 20 years and over	3,814	3,089	3,163	6.2	5.5	5.4	5.2	5.0	5.1
Women, 16 years and over	3,657	3,291	3,281	6.9	5.9	6.1	6.0	6.1	6.1
Women, 20 years and over	2,994	2,703	2,605	6.1	5.2	5.4	5.3	5.4	5.2
Both sexes, 16 to 19 years	1,414	1,297	1,406	17.7	15.9	15.5	16.0	16.3	17.4
Married men, spouse present	1,898	1,523	1,576	4.6	4.0	3.8	3.7	3.6	3.7
Married women, spouse present	1,430	1,219	1,208	5.0	4.0	4.2	4.3	4.2	4.1
Women who maintain families	590	597	610	8.9	9.7	9.4	9.0	8.8	9.0
Full-time workers	6,688	5,587	5,718	6.6	5.9	5.7	5.6	5.4	5.5
Part-time workers	1,563	1,473	1,465	9.2	6.9	7.9	8.2	8.5	8.5
Labor force time lost[2]	--	--	--	7.8	7.1	6.9	6.8	6.7	6.8
INDUSTRY									
Nonagricultural private wage and salary workers	6,233	5,300	5,262	7.0	6.2	6.1	5.9	5.9	5.9
Mining	141	59	77	14.5	10.8	7.8	8.9	7.0	8.5
Construction	860	752	694	13.8	11.6	10.7	11.2	12.1	11.4
Manufacturing	1,590	1,251	1,253	7.3	5.6	6.0	5.5	5.7	5.7
Durable goods	958	727	669	7.2	5.3	6.1	5.5	5.6	5.2
Nondurable goods	632	524	584	7.3	6.0	5.9	5.5	5.9	6.5
Transportation and public utilities	326	245	267	5.2	5.0	4.4	4.3	4.0	4.4
Wholesale and retail trade	1,656	1,456	1,481	7.4	7.2	6.8	7.0	6.4	6.4
Finance and service industries	1,660	1,537	1,490	5.4	4.8	5.1	4.6	4.9	4.7
Government workers	622	600	581	3.7	3.4	3.4	3.9	3.4	3.3
Agricultural wage and salary workers	211	147	209	11.9	8.8	11.3	10.8	8.3	10.9

[1] Unemployment as a percent of the civilian labor force.
[2] Aggregate hours lost by the unemployed and persons on part time for economic reasons as a percent of potentially available labor force hours.

Table A-7. Duration of unemployment

(Numbers in thousands)

Weeks of unemployment	Not seasonally adjusted			Seasonally adjusted					
	Oct. 1986	Sept. 1987	Oct. 1987	Oct. 1986	June 1987	July 1987	Aug. 1987	Sept. 1987	Oct. 1987
DURATION									
Less than 5 weeks	3,411	3,391	3,211	3,418	3,085	3,168	3,197	3,230	3,227
5 to 14 weeks	2,463	1,764	2,032	2,563	2,114	2,141	2,170	1,932	2,121
15 weeks and over	1,968	1,701	1,602	2,168	2,055	1,907	1,884	1,920	1,759
15 to 26 weeks	840	744	712	950	998	945	814	909	799
27 weeks and over	1,128	957	891	1,218	1,057	962	1,070	1,011	959
Average (mean) duration, in weeks	14.8	13.9	13.7	15.2	14.8	14.0	14.3	14.2	14.0
Median duration, in weeks	6.4	5.1	5.7	7.0	6.7	6.7	6.4	5.7	6.2
PERCENT DISTRIBUTION									
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	43.5	49.5	46.9	41.9	42.5	43.9	44.1	45.6	45.4
5 to 14 weeks	31.4	25.7	29.7	31.5	29.1	29.7	29.9	27.3	29.8
15 weeks and over	25.1	24.8	23.4	26.6	28.3	26.4	26.0	27.1	24.7
15 to 26 weeks	10.7	10.9	10.4	11.7	13.8	13.1	11.2	12.8	11.2
27 weeks and over	14.4	14.0	13.0	14.9	14.6	13.3	14.8	14.3	13.5

Table A-8. Reason for unemployment

(Numbers in thousands)

Reason	Not seasonally adjusted			Seasonally adjusted					
	Oct. 1986	Sept. 1987	Oct. 1987	Oct. 1986	June 1987	July 1987	Aug. 1987	Sept. 1987	Oct. 1987
NUMBER OF UNEMPLOYED									
Job losers	3,597	2,942	3,082	3,984	3,565	3,522	3,339	3,321	3,447
On layoff	860	643	768	1,072	901	918	850	810	956
Other job losers	2,737	2,299	2,314	2,912	2,664	2,604	2,489	2,511	2,491
Job leavers	1,090	1,086	1,030	1,027	949	1,007	1,006	995	956
Reentrants	2,281	1,975	1,873	2,190	1,969	1,913	1,997	1,895	1,794
New entrants	874	854	861	972	798	801	829	853	961
PERCENT DISTRIBUTION									
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	45.9	42.9	45.0	48.7	49.0	48.6	46.6	46.9	48.2
On layoff	11.0	9.4	11.2	13.1	12.4	12.7	11.9	11.4	13.4
Other job losers	34.9	33.5	33.8	35.6	36.6	36.0	34.7	35.4	34.8
Job leavers	13.9	15.8	15.0	12.6	13.0	13.9	14.0	14.0	13.4
Reentrants	29.1	28.8	27.4	26.8	27.0	26.4	27.9	26.6	25.1
New entrants	11.1	12.5	12.6	11.9	11.0	11.1	11.6	12.5	13.4
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE									
Job losers	3.0	2.4	2.5	3.4	3.0	2.9	2.8	2.8	2.9
Job leavers	.9	.9	.9	.9	.8	.8	.8	.8	.8
Reentrants	1.9	1.6	1.6	1.8	1.6	1.6	1.7	1.6	1.5
New entrants	.7	.7	.7	.8	.7	.7	.7	.7	.8

Table A-9. Unemployed persons by sex and age, seasonally adjusted

Sex and age	Number of unemployed persons (in thousands)			Unemployment rates[1]					
	Oct. 1986	Sept. 1987	Oct. 1987	Oct. 1986	June 1987	July 1987	Aug. 1987	Sept. 1987	Oct. 1987
Total, 16 years and over	8,222	7,089	7,174	6.9	6.1	6.0	6.0	5.9	6.0
16 to 24 years	3,022	2,675	2,681	13.0	12.2	11.7	11.6	11.7	11.8
16 to 19 years	1,414	1,297	1,406	17.7	15.9	15.5	16.0	16.3	17.4
16 to 17 years	647	578	734	19.3	18.8	17.1	18.0	17.4	20.9
18 to 19 years	766	707	672	16.5	13.7	13.9	14.7	15.4	14.6
20 to 24 years	1,608	1,378	1,275	10.5	10.2	9.8	9.1	9.3	8.7
25 years and over	5,197	4,433	4,499	5.5	4.6	4.7	4.7	4.6	4.6
25 to 54 years	4,597	3,901	4,016	5.7	4.9	5.0	5.0	4.7	4.9
55 years and over	603	502	478	4.1	3.2	3.1	3.2	3.4	3.2
Men, 16 years and over	4,565	3,798	3,893	7.0	6.2	6.0	6.0	5.7	5.9
16 to 24 years	1,615	1,416	1,424	13.2	12.6	11.9	12.4	11.9	12.0
16 to 19 years	751	709	730	18.2	16.4	15.5	18.0	17.3	17.5
16 to 17 years	344	309	387	19.8	18.7	16.6	20.6	18.3	21.5
18 to 19 years	409	387	344	17.0	14.4	13.8	16.3	16.0	14.4
20 to 24 years	864	707	694	10.7	10.7	10.0	9.3	9.1	9.1
25 years and over	2,945	2,402	2,471	5.5	4.7	4.7	4.7	4.4	4.5
25 to 54 years	2,558	2,101	2,188	5.7	5.0	4.9	4.9	4.6	4.8
55 years and over	385	276	277	4.4	3.4	3.4	3.4	3.2	3.1
Women, 16 years and over	3,657	3,291	3,281	6.9	5.9	6.1	6.0	6.1	6.1
16 to 24 years	1,407	1,259	1,257	12.7	11.7	11.6	10.7	11.6	11.5
16 to 19 years	663	588	676	17.2	15.4	15.4	13.9	15.4	17.2
16 to 17 years	303	269	347	18.6	18.9	17.7	15.3	16.5	20.3
18 to 19 years	357	320	328	16.0	13.0	14.0	12.9	14.6	14.8
20 to 24 years	744	671	581	10.3	9.7	9.5	8.9	9.5	8.3
25 years and over	2,252	2,031	2,028	5.4	4.4	4.7	4.7	4.7	4.7
25 to 54 years	2,039	1,800	1,829	5.7	4.7	5.0	5.0	4.9	5.0
55 years and over	218	226	201	3.6	2.8	2.6	2.9	3.7	3.2

[1] Unemployment as a percent of the civilian labor force.

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Table A-10. Employment status of black and other workers

(Numbers in thousands)

Employment status	Not seasonally adjusted			Seasonally adjusted[1]					
	Oct. 1986	Sept. 1987	Oct. 1987	Oct. 1986	June 1987	July 1987	Aug. 1987	Sept. 1987	Oct. 1987
Civilian noninstitutional population	25,330	25,919	25,969	25,330	25,773	25,826	25,868	25,919	25,969
Civilian labor force	16,194	16,589	16,809	16,148	16,439	16,632	16,705	16,566	16,775
Participation rate	63.9	64.0	64.7	63.8	63.8	64.4	64.6	63.9	64.6
Employed	14,155	14,766	15,017	14,097	14,566	14,750	14,812	14,774	14,964
Employment-population ratio[2]	55.9	57.0	57.8	55.7	56.5	57.1	57.3	57.0	57.6
Unemployed	2,040	1,824	1,793	2,051	1,873	1,882	1,893	1,792	1,810
Unemployment rate	12.6	11.0	10.7	12.7	11.4	11.3	11.3	10.8	10.8
Not in labor force	9,136	9,330	9,159	9,182	9,334	9,194	9,163	9,353	9,194

[1] The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

[2] Civilian employment as a percent of the civilian noninstitutional population.

Table A-11. Occupational status of the employed and unemployed, not seasonally adjusted

(Numbers in thousands)

Occupation	Civilian employed		Unemployed		Unemployment rate	
	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987
Total, 16 years and over[1]	110,857	113,898	7,842	6,845	6.6	5.7
Managerial and professional specialty	26,975	28,309	698	630	2.5	2.2
Executive, administrative, and managerial	12,892	13,729	366	378	2.8	2.7
Professional specialty	14,082	14,580	332	252	2.3	1.7
Technical, sales, and administrative support	34,936	35,667	1,669	1,575	4.6	4.2
Technicians and related support	3,489	3,507	112	104	3.1	2.9
Sales occupations	13,489	13,680	651	652	4.6	4.5
Administrative support, including clerical	17,958	18,480	906	820	4.8	4.2
Service occupations	14,725	14,908	1,440	1,176	8.9	7.3
Private household	963	953	65	42	6.3	4.2
Protective service	1,688	1,851	83	86	4.7	4.5
Service, except private household and protective	12,074	12,104	1,292	1,048	9.7	8.0
Precision production, craft, and repair	13,567	13,722	889	704	6.1	4.9
Mechanics and repairers	4,396	4,464	177	163	3.9	3.5
Construction trades	5,011	5,132	450	361	8.2	6.6
Other precision production, craft, and repair	4,160	4,126	262	180	5.9	4.2
Operators, fabricators, and laborers	17,178	17,738	1,965	1,602	10.3	8.3
Machine operators, assemblers, and inspectors	7,872	8,099	884	711	10.1	8.1
Transportation and material moving occupations	4,631	4,896	352	318	7.1	6.1
Handlers, equipment cleaners, helpers, and laborers	4,675	4,743	729	573	13.5	10.8
Construction laborers	770	791	198	165	20.5	17.3
Other handlers, equipment cleaners, helpers, and laborers	3,906	3,951	531	409	12.0	9.4
Farming, forestry, and fishing	3,477	3,554	263	260	7.0	6.8

[1] Persons with no previous work experience and those whose last job was in the Armed Forces are included in the unemployed total.

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Table A-12. Employment status of male Vietnam-era veterans and nonveterans by age, not seasonally adjusted

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
			Total		Employed		Unemployed			
							Number		Percent of labor force	
	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987
VIETNAM-ERA VETERANS										
Total, 30 years and over	7,778	7,853	7,253	7,277	6,918	6,983	335	294	4.6	4.0
30 to 44 years	6,349	6,128	6,089	5,843	5,784	5,594	305	249	5.0	4.3
30 to 34 years	1,084	856	1,037	817	947	749	90	68	8.7	8.3
35 to 39 years	2,932	2,478	2,819	2,344	2,684	2,259	135	85	4.8	3.6
40 to 44 years	2,333	2,794	2,233	2,682	2,153	2,586	80	96	3.6	3.6
45 years and over	1,429	1,725	1,164	1,434	1,134	1,389	30	45	2.6	3.1
NONVETERANS										
Total, 30 to 44 years	18,691	19,741	17,711	18,785	16,790	17,974	921	811	5.2	4.3
30 to 34 years	8,629	8,920	8,169	8,541	7,734	8,147	435	394	5.3	4.6
35 to 39 years	5,853	6,379	5,559	6,074	5,257	5,838	302	236	5.4	3.9
40 to 44 years	4,209	4,442	3,983	4,170	3,799	3,989	184	181	4.6	4.3

NOTE: Male Vietnam-era veterans are men who served in the Armed Forces between August 5, 1964 and May 7, 1975. Nonveterans are men who have never served in the Armed Forces; published data are limited to those 30 to 44 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population.

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Table A-13. Employment status of the civilian population for eleven large States

(Numbers in thousands)

State and employment status	Not seasonally adjusted[1]			Seasonally adjusted[2]					
	Oct. 1986	Sept. 1987	Oct. 1987	Oct. 1986	June 1987	July 1987	Aug. 1987	Sept. 1987	Oct. 1987
California									
Civilian noninstitutional population	20,242	20,660	20,695	20,242	20,553	20,592	20,624	20,660	20,695
Civilian labor force	13,528	13,804	13,836	13,491	13,742	13,819	13,775	13,823	13,801
Employed	12,693	13,039	13,065	12,598	12,989	13,064	13,036	13,026	12,979
Unemployed	834	765	771	893	753	755	739	797	822
Unemployment rate	6.2	5.5	5.6	6.6	5.5	5.5	5.4	5.8	6.0
Florida									
Civilian noninstitutional population	9,244	9,480	9,500	9,244	9,419	9,441	9,460	9,480	9,500
Civilian labor force	5,680	5,902	5,962	5,679	5,840	5,899	5,851	5,868	5,961
Employed	5,348	5,591	5,666	5,368	5,546	5,587	5,519	5,574	5,679
Unemployed	332	311	296	311	294	312	332	294	282
Unemployment rate	5.8	5.3	5.0	5.5	5.0	5.3	5.7	5.0	4.7
Illinois									
Civilian noninstitutional population	8,664	8,687	8,688	8,664	8,684	8,687	8,686	8,687	8,688
Civilian labor force	5,693	5,804	5,851	5,678	5,727	5,778	5,819	5,804	5,828
Employed	5,279	5,448	5,483	5,252	5,297	5,356	5,409	5,434	5,446
Unemployed	413	355	368	426	430	422	410	370	382
Unemployment rate	7.3	6.1	6.3	7.5	7.5	7.3	7.0	6.4	6.6
Massachusetts									
Civilian noninstitutional population	4,557	4,574	4,575	4,557	4,571	4,573	4,573	4,574	4,575
Civilian labor force	3,038	3,053	3,097	3,047	3,114	3,069	3,097	3,051	3,107
Employed	2,935	2,969	3,014	2,929	3,015	2,993	3,005	2,975	3,007
Unemployed	103	84	84	118	99	76	[illegible]	76	100
Unemployment rate	3.4	2.8	2.7	3.9	3.2	2.5	3.0	2.5	3.2
Michigan									
Civilian noninstitutional population	6,878	6,939	6,944	6,878	6,925	6,931	6,934	6,939	6,944
Civilian labor force	4,424	4,576	4,518	4,441	4,513	4,503	4,638	4,606	4,532
Employed	4,064	4,242	4,208	4,065	4,124	4,129	4,231	4,246	4,205
Unemployed	360	333	310	376	389	374	407	360	327
Unemployment rate	8.1	7.3	6.9	8.5	8.6	8.3	8.8	7.8	7.2
New Jersey									
Civilian noninstitutional population	5,939	5,994	5,999	5,939	5,981	5,987	5,990	5,994	5,999
Civilian labor force	3,860	3,884	3,952	3,876	3,977	3,930	3,986	3,916	3,965
Employed	3,674	3,732	3,808	3,674	3,809	3,771	3,815	3,740	3,812
Unemployed	186	153	144	202	168	159	171	176	153
Unemployment rate	4.8	3.9	3.6	5.2	4.2	4.0	4.3	4.5	3.9
New York									
Civilian noninstitutional population	13,742	13,784	13,786	13,742	13,777	13,782	13,781	13,784	13,786
Civilian labor force	8,441	8,395	8,534	8,387	8,535	8,481	8,526	8,392	8,480
Employed	7,972	8,027	8,118	7,907	8,145	8,106	8,145	8,012	8,057
Unemployed	468	369	416	480	390	375	381	380	423
Unemployment rate	5.5	4.4	4.9	5.7	4.6	4.4	4.5	4.5	5.0
North Carolina									
Civilian noninstitutional population	4,780	4,854	4,861	4,780	4,836	4,843	4,848	4,854	4,861
Civilian labor force	3,212	3,303	3,354	3,206	3,292	3,322	3,306	3,313	3,350
Employed	3,049	3,187	3,225	3,041	3,143	3,171	3,165	3,182	3,218
Unemployed	163	116	129	165	149	151	141	131	132
Unemployment rate	5.1	3.5	3.9	5.1	4.5	4.5	4.3	4.0	3.9
Ohio									
Civilian noninstitutional population	8,112	8,137	8,138	8,112	8,133	8,136	8,136	8,137	8,138
Civilian labor force	5,263	5,171	5,221	5,214	5,237	5,240	5,205	5,148	5,176
Employed	4,855	4,885	4,920	4,810	4,859	4,868	4,841	4,865	4,876
Unemployed	408	287	301	404	378	372	364	283	300
Unemployment rate	7.8	5.5	5.8	7.7	7.2	7.1	7.0	5.5	5.8
Pennsylvania									
Civilian noninstitutional population	9,249	9,286	9,288	9,249	9,279	9,283	9,283	9,286	9,288
Civilian labor force	5,650	5,708	5,787	5,597	5,630	5,616	5,697	5,675	5,738
Employed	5,325	5,411	5,480	5,244	5,310	5,295	5,383	5,359	5,400
Unemployed	325	297	307	353	320	321	314	316	338
Unemployment rate	5.7	5.2	5.3	6.3	5.7	5.7	5.5	5.6	5.9
Texas									
Civilian noninstitutional population	12,052	12,264	12,282	12,052	12,211	12,231	12,246	12,264	12,282
Civilian labor force	8,295	8,430	8,409	8,288	8,372	8,456	8,546	8,401	8,390
Employed	7,555	7,713	7,791	7,506	7,656	7,753	7,828	7,685	7,737
Unemployed	740	717	618	782	716	703	718	715	653
Unemployment rate	8.9	8.5	7.4	9.4	8.6	8.3	8.4	8.5	7.8

[1] These are the official Bureau of Labor Statistics' estimates used in the administration of Federal fund allocation programs.

[2] The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and the seasonally adjusted columns.

ESTABLISHMENT DATA

Table B-1. Employees on nonagricultural payrolls by industry

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted					
	Oct. 1986	Aug. 1987	Sept. 1987 P	Oct. 1987 P	Oct. 1986	June 1987	July 1987	Aug. 1987	Sept. 1987 P	Oct. 1987 P
Total	100,984	102,152	102,913	103,748	100,279	101,919	102,126	102,275	102,396	102,945
Total private	83,918	86,107	86,139	86,304	83,337	84,787	85,018	85,229	85,348	85,709
Goods-producing	24,982	25,346	25,400	25,394	24,611	24,761	24,850	24,884	24,910	25,018
Mining	737	755	759	764	735	738	744	751	758	762
Oil and gas extraction	415.7	433.0	435.1	441.0	416	425	430	434	439	441
Construction	5,204	5,366	5,292	5,285	4,942	5,008	5,002	5,006	4,978	5,019
General building contractors	1,345.7	1,345.0	1,318.7	1,325.8	1,299	1,266	1,261	1,262	1,257	1,270
Manufacturing	19,041	19,225	19,349	19,345	18,934	19,015	19,104	19,129	19,174	19,237
Production workers	12,954	13,104	13,251	13,241	12,849	12,958	13,020	13,038	13,082	13,138
Durable goods	11,209	11,238	11,343	11,362	11,169	11,176	11,195	11,248	11,276	11,321
Production workers	7,410	7,447	7,566	7,584	7,369	7,421	7,425	7,475	7,504	7,546
Lumber and wood products	731.3	762.2	761.2	755.4	719	735	740	736	740	742
Furniture and fixtures	502.6	515.7	521.8	526.1	499	510	518	518	520	522
Stone, clay, and glass products	592.2	596.2	595.1	594.1	581	582	582	582	581	583
Primary metal industries	726.8	752.9	764.1	764.8	733	746	750	754	765	771
Blast furnaces and basic steel products	257.4	279.0	281.7	282.9	262	275	277	278	283	288
Fabricated metal products	1,429.9	1,423.5	1,441.1	1,446.4	1,421	1,424	1,424	1,425	1,430	1,438
Machinery, except electrical	2,017.7	2,031.4	2,050.6	2,057.0	2,022	2,028	2,033	2,044	2,053	2,061
Electrical and electronic equipment	2,124.2	2,095.0	2,106.0	2,118.1	2,120	2,080	2,088	2,095	2,098	2,114
Transportation equipment	2,014.8	1,991.4	2,029.7	2,022.6	2,013	2,010	1,995	2,028	2,022	2,021
Motor vehicles and equipment	852.2	819.4	847.7	841.0	850	842	814	848	840	838
Instruments and related products	700.8	695.9	694.9	693.8	702	693	695	695	695	694
Miscellaneous manufacturing	368.6	373.8	378.3	383.7	360	368	370	371	372	375
Nondurable goods	7,832	7,987	8,006	7,983	7,765	7,839	7,909	7,881	7,898	7,916
Production workers	5,544	5,657	5,685	5,657	5,480	5,537	5,595	5,563	5,578	5,592
Food and kindred products	1,664.9	1,722.1	1,714.2	1,677.1	1,621	1,634	1,644	1,632	1,628	1,633
Tobacco manufactures	62.5	56.7	59.6	57.4	58	57	57	56	55	53
Textile mill products	713.1	736.1	740.5	740.1	709	729	736	732	735	736
Apparel and other textile products	1,114.1	1,111.0	1,126.8	1,132.5	1,104	1,108	1,130	1,110	1,119	1,122
Paper and allied products	678.2	681.2	681.8	678.2	677	676	678	677	680	677
Printing and publishing	1,468.8	1,503.6	1,502.0	1,510.7	1,469	1,498	1,504	1,508	1,507	1,511
Chemicals and allied products	1,018.5	1,036.3	1,032.0	1,031.0	1,020	1,014	1,026	1,031	1,030	1,032
Petroleum and coal products	166.1	167.6	167.9	166.6	166	164	164	164	167	167
Rubber and miscellaneous plastics products	796.2	818.2	827.1	833.8	794	810	815	819	825	832
Leather and leather products	149.6	154.0	154.3	155.2	147	149	155	152	152	153
Service-producing	76,002	76,806	77,513	78,355	75,598	77,057	77,276	77,389	77,486	77,927
Transportation and public utilities	5,296	5,386	5,456	5,471	5,251	5,350	5,363	5,377	5,406	5,422
Transportation	3,101	3,138	3,222	3,240	3,053	3,128	3,133	3,147	3,174	3,189
Communication and public utilities	2,195	2,248	2,234	2,231	2,198	2,222	2,230	2,230	2,232	2,233
Wholesale trade	5,739	5,838	5,835	5,855	5,731	5,781	5,797	5,807	5,813	5,824
Durable goods	3,385	3,439	3,432	3,442	3,379	3,405	3,418	3,422	3,429	3,435
Nondurable goods	2,374	2,399	2,403	2,413	2,352	2,376	2,379	2,385	2,384	2,389
Retail trade	18,034	18,384	18,411	18,443	17,980	18,226	18,274	18,256	18,319	18,388
General merchandise stores	2,402.8	2,362.7	2,379.6	2,454.2	2,385	2,387	2,407	2,411	2,416	2,435
Food stores	2,912.5	2,961.6	2,962.9	2,979.9	2,901	2,960	2,959	2,962	2,960	2,968
Automotive dealers and service stations	1,962.7	2,009.0	1,999.3	2,002.7	1,960	1,983	1,985	1,985	1,987	2,001
Eating and drinking places	5,924.3	6,177.5	6,185.4	6,039.9	5,919	5,982	5,985	5,992	6,017	6,034
Finance, insurance, and real estate	6,383	6,704	6,642	6,619	6,395	6,586	6,608	6,624	6,626	6,633
Finance	3,195	3,319	3,290	3,291	3,204	3,280	3,291	3,293	3,293	3,301
Insurance	1,977	2,058	2,048	2,048	1,980	2,037	2,043	2,050	2,050	2,052
Real estate	1,211	1,327	1,304	1,280	1,211	1,269	1,274	1,281	1,283	1,280
Services	23,464	24,449	24,395	24,522	23,369	24,083	24,214	24,279	24,274	24,424
Business services	4,911.2	5,189.6	5,194.0	5,233.9	4,861	5,086	5,105	5,133	5,148	5,182
Health services	6,642.6	6,950.6	6,949.8	6,994.3	6,644	6,853	6,887	6,923	6,943	6,994
Government	17,066	16,045	16,774	17,445	16,872	17,031	17,020	17,046	17,048	17,236
Federal	2,876	2,966	2,962	2,934	2,897	2,935	2,936	2,940	2,963	2,955
State	4,001	3,738	3,900	4,096	3,907	3,932	3,952	3,964	3,971	4,000
Local	10,189	9,341	9,932	10,415	10,068	10,164	10,132	10,142	10,114	10,281

P = preliminary.

ESTABLISHMENT DATA

Table B-2. Average weekly hours of production or nonsupervisory workers[1] on private nonagricultural payrolls by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	Oct. 1986	Aug. 1987	Sept. 1987 p	Oct. 1987 p	Oct. 1986	Nov. 1987	July 1987	Aug. 1987	Sept. 1987 p	Oct. 1987 p
Total private	34.7	35.2	34.7	34.9	34.7	34.9	34.9	34.9	34.9	34.9
Mining	42.1	42.6	42.1	43.1	(2)	(2)	(2)	(2)	(2)	(2)
Construction	37.9	38.6	38.4	38.7	(2)	(2)	(2)	(2)	(2)	(2)
Manufacturing	40.7	40.9	40.6	41.1	40.7	41.3	41.0	41.0	40.6	41.1
Overtime hours	3.5	3.9	3.9	4.3	3.5	3.7	3.9	3.8	3.6	4.0
Durable goods	41.3	41.3	41.0	41.7	41.3	41.5	41.6	41.6	40.9	41.7
Overtime hours	3.6	3.9	3.9	4.2	3.5	3.8	3.8	4.0	3.7	4.1
Lumber and wood products	40.6	40.7	39.9	40.4	40.6	40.6	40.6	40.4	39.6	40.2
Furniture and fixtures	40.5	40.3	39.7	40.5	39.9	40.0	40.0	40.1	39.2	39.9
Stone, clay, and glass products	42.6	42.6	42.4	42.7	42.3	42.0	42.2	42.1	41.8	42.3
Primary metal industries	42.0	43.0	43.2	43.7	42.3	43.1	43.4	43.5	42.2	44.0
Blast furnaces and basic steel products	41.0	43.5	43.0	44.0	42.6	43.3	44.1	44.0	43.1	43.5
Fabricated metal products	41.3	41.3	40.8	41.7	41.3	41.5	41.4	41.5	40.7	41.7
Machinery, except electrical	41.5	41.8	41.3	42.3	41.7	42.2	42.4	42.2	41.3	42.5
Electrical and electronic equipment	41.0	40.8	40.5	40.8	41.0	41.1	41.1	41.0	40.4	40.9
Transportation equipment	41.9	41.1	41.0	42.2	42.1	41.9	41.7	41.9	41.1	42.4
Motor vehicles and equipment	41.9	40.8	40.8	42.6	42.1	42.0	41.9	41.9	41.0	42.9
Instruments and related products	40.7	41.2	40.8	41.8	40.9	41.5	41.6	41.7	40.8	42.1
Miscellaneous manufacturing	39.8	39.6	39.9	39.7	(2)	(2)	(2)	(2)	(2)	(2)
Nondurable goods	40.0	40.4	40.2	40.3	39.9	40.2	40.3	40.3	39.9	40.3
Overtime hours	3.5	3.9	4.0	3.9	3.4	3.6	3.7	3.7	3.6	3.8
Food and kindred products	40.5	40.7	40.6	40.7	39.8	40.1	39.9	40.3	40.0	40.3
Tobacco manufactures	39.0	36.1	38.5	40.3	(2)	(2)	(2)	(2)	(2)	(2)
Textile mill products	41.6	42.3	41.5	41.8	41.4	42.1	42.4	42.1	41.1	41.8
Apparel and other textile products	36.9	37.4	36.1	37.2	36.8	37.1	37.3	37.4	36.1	37.1
Paper and allied products	43.1	43.2	44.0	43.3	43.1	43.3	43.5	43.4	43.7	43.3
Printing and publishing	38.1	38.1	38.4	38.1	38.0	38.1	38.1	37.9	38.1	38.0
Chemicals and allied products	41.8	42.1	42.3	42.1	42.0	42.0	42.2	42.4	42.3	42.4
Petroleum and coal products	43.9	43.5	43.6	43.4	43.7	43.3	44.4	43.3	43.0	43.1
Rubber and miscellaneous plastics products	41.3	41.4	41.2	41.8	(2)	(2)	(2)	(2)	(2)	(2)
Leather and leather products	36.8	38.9	37.2	38.1	(2)	(2)	(2)	(2)	(2)	(2)
Transportation and public utilities	39.1	39.6	39.0	39.2	39.1	38.8	39.2	39.3	38.9	39.2
Wholesale trade	38.4	38.4	38.2	38.4	38.3	38.4	38.1	38.3	38.1	38.4
Retail trade	29.0	29.3	29.6	29.1	29.1	29.2	29.3	29.6	29.6	29.2
Finance, insurance, and real estate	36.4	36.4	36.0	36.1	(2)	(2)	(2)	(2)	(2)	(2)
Services	32.4	32.9	32.4	32.5	32.4	32.5	32.5	32.5	32.5	32.5

[1] Data relate to production workers in mining and manufacturing, to construction workers in construction, and to nonsupervisory workers in transportation and public utilities, wholesale and retail trade, finance, insurance, and real estate, and services. These groups account for approximately four-fifths of the total employees on private nonagricultural payrolls.

[2] This series is not published seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

p = preliminary.

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ESTABLISHMENT DATA

Table B-3. Average hourly and weekly earnings of production or nonsupervisory workers[1] on private nonagricultural payrolls by industry

Industry	Average hourly earnings				Average weekly earnings			
	Oct. 1986	Aug. 1987	Sept. 1987 p	Oct. 1987 p	Oct. 1986	Aug. 1987	Sept. 1987 p	Oct. 1987 p
Total private	$8.82	$8.94	$9.05	$9.08	$306.05	$315.58	$314.04	$316.89
Seasonally adjusted	8.82	9.02	9.01	9.07	306.05	314.80	311.75	315.64
Mining	12.50	12.52	12.45	12.53	526.25	522.37	524.15	531.42
Construction	12.68	12.67	12.78	12.78	480.57	489.06	465.19	494.59
Manufacturing	9.72	9.86	9.98	9.94	395.60	403.27	405.19	408.53
Durable goods	10.27	10.42	10.48	10.46	424.15	430.35	429.68	436.18
Lumber and wood products	8.32	8.49	8.48	8.45	337.79	345.54	338.35	341.38
Furniture and fixtures	7.53	7.74	7.77	7.77	304.97	311.92	308.47	314.69
Stone, clay, and glass products	10.10	10.31	10.42	10.34	430.26	439.21	441.81	441.52
Primary metal industries	11.75	11.98	12.26	11.99	493.50	515.14	529.63	523.96
Blast furnaces and basic steel products	13.63	13.81	14.16	13.80	569.73	600.74	637.20	619.62
Fabricated metal products	9.88	9.97	9.65	9.70	408.06	411.76	393.72	404.49
Machinery, except electrical	10.58	10.76	10.81	10.82	439.07	449.77	448.62	457.69
Electrical and electronic equipment	9.67	9.90	9.98	9.96	396.47	403.92	404.19	407.36
Transportation equipment	12.62	12.90	13.10	13.15	537.16	530.19	537.10	554.93
Motor vehicles and equipment	13.42	13.43	13.74	13.83	562.30	547.94	560.59	589.16
Instruments and related products	9.56	9.78	9.82	9.75	389.09	403.91	400.66	407.55
Miscellaneous manufacturing	7.57	7.70	7.77	7.77	301.29	303.38	303.03	308.47
Nondurable goods	8.96	9.12	9.29	9.21	358.40	368.45	373.46	371.16
Food and kindred products	8.69	8.80	8.96	8.92	347.60	358.16	363.78	363.04
Tobacco manufactures	12.14	14.20	12.87	12.74	473.46	512.62	495.50	519.42
Textile mill products	7.02	7.16	7.22	7.23	292.03	302.87	298.63	302.21
Apparel and other textile products	5.87	5.90	6.03	6.02	216.40	220.66	217.68	223.94
Paper and allied products	11.25	11.41	11.69	11.49	484.88	492.91	514.36	497.52
Printing and publishing	10.09	10.31	10.50	10.45	384.43	392.81	403.20	398.15
Chemicals and allied products	12.08	12.34	12.56	12.49	504.96	519.51	533.80	525.83
Petroleum and coal products	14.19	14.52	14.71	14.66	622.96	631.62	641.36	636.24
Rubber and miscellaneous plastics products	8.73	8.90	8.99	8.94	362.30	368.46	370.39	373.69
Leather and leather products	5.95	6.01	6.14	6.13	218.96	233.79	228.41	233.55
Transportation and public utilities	11.77	11.97	12.00	12.00	460.21	474.01	468.00	470.40
Wholesale trade	9.36	9.62	9.68	9.65	359.42	369.41	369.78	370.56
Retail trade	6.06	6.06	6.21	6.16	175.74	183.62	183.82	179.26
Finance, insurance, and real estate	8.39	8.81	8.81	8.79	305.40	320.68	317.16	317.32
Services	8.23	8.40	8.56	8.61	266.65	276.36	276.70	279.83

[1] See footnote 1, table B-2.

p = preliminary.

Table B-4. Hourly Earnings Index for production or nonsupervisory workers[1] on private nonagricultural payrolls by industry

(1977 = 100)

Industry	Not seasonally adjusted					Seasonally adjusted						
	Oct. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Percent change from: Oct. 1986-Oct. 1987	Oct. 1986	June 1987	July 1987	Aug. 1987	Sept. 1987	Oct. 1987	Percent change from: Sept. 1987-Oct. 1987
Total private nonfarm:												
Current dollars	170.2	173.2	174.8	174.6	2.6	170.2	172.9	173.2	174.1	174.5	174.6	0.1
Constant (1977) dollars	93.0	93.2	93.6	N.A.	(2)	93.1	93.8	93.7	93.7	93.7	N.A.	(3)
Mining	181.7	181.6	183.2	181.8	-.1	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Construction	154.7	154.7	155.9	156.2	0.9	153.2	155.0	154.3	154.7	154.1	156 7	.4
Manufacturing	172.4	174.7	175.8	175.2	1.6	173.0	174.7	174.7	175.5	176.2	175.8	-.3
Transportation and public utilities	172.3	175.1	176.3	176.4	2.4	171.9	175.6	176.4	176 0	175.6	176.0	.2
Wholesale trade	172.9	177.4	178.6	178.5	3.1	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Retail trade	159.0	160.4	163.4	162.0	1.9	159.3	160.5	160.9	161.5	162.9	162.4	-.3
Finance, insurance, and real estate	180.5	189.4	189.1	189.2	4.9	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Services	175.7	180.4	182.8	183.6	4.5	175.7	179.9	180.5	182 4	182.1	183 6	.8

1 See footnote 1, table B-2.
2 Change is -1.5 percent from September 1986 to September 1987, the latest month available.
3 Change is less than .05 percent from August 1987 to September 1987, the latest month available.
4 These series are not seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.
N.A. Data not available.
p = preliminary.

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ESTABLISHMENT DATA

Table B-5. Indexes of aggregate weekly hours of production or nonsupervisory workers[1] on private nonagricultural payrolls, by industry

(1977 = 100)

Industry	Not seasonally adjusted				Seasonally adjusted					
	Oct. 1986	Aug. 1987	Sept. 1987 p	Oct. 1987 p	Oct. 1986	June 1987	July 1987	Aug. 1987	Sept. 1987 p	Oct. 1987 p
Total	118.8	123.8	121.8	122.6	117.7	120.0	120.6	121.2	120.2	121.5
Goods-producing	99.9	102.2	100.8	103.1	97.6	98.9	99.5	99.7	97.5	100.8
Mining	81.4	85.9	86.0	88.6	81.0	83.5	85.0	85.2	86.9	88.2
Construction	142.0	148.4	137.5	146.0	131.6	132.6	133.2	133.6	124.6	135.3
Manufacturing	92.6	94.0	94.4	95.5	91.9	93.1	93.6	93.8	92.8	94.7
Durable goods	89.9	90.3	91.0	92.9	89.5	90.5	90.6	91.2	90.0	92.5
Lumber and wood products	101.7	106.1	103.6	104.0	99.2	101.7	102.4	101.2	99.0	101.5
Furniture and fixtures	109.3	111.4	111.1	114.8	106.8	109.5	111.6	111.7	109.4	112.2
Stone, clay, and glass products	88.7	89.5	89.3	89.6	86.1	86.1	86.1	86.1	85.5	87.1
Primary metal industries	59.8	64.3	65.8	66.5	60.7	63.5	64.4	65.0	65.7	67.5
Blast furnaces and basic steel products	46.1	52.6	55.1	55.2	47.7	51.4	52.6	53.0	55.1	56.9
Fabricated metal products	89.1	88.6	89.1	91.7	88.3	89.1	89.0	89.4	88.1	90.9
Machinery, except electrical	83.8	85.4	86.4	88.6	84.4	86.5	87.0	87.4	86.6	89.3
Electrical and electronic equipment	101.1	99.9	100.3	102.7	100.8	99.9	100.6	100.8	99.7	102.2
Transportation equipment	96.4	92.2	95.2	97.3	96.8	96.6	94.3	97.4	95.1	97.7
Motor vehicles and equipment	84.9	79.7	83.6	86.3	84.9	85.1	81.5	86.1	83.3	86.5
Instruments and related products	[illegible].1	102.0	101.3	102.9	101.8	102.2	103.0	103.0	101.3	104.3
Miscellaneous manufacturing	82.9	82.9	83.1	86.2	79.0	81.4	81.9	82.3	80.7	82.3
Nondurable goods	96.5	99.5	99.5	99.4	95.3	97.0	98.1	97.7	96.9	98.1
Food and kindred products	101.8	107.9	107.3	104.5	97.6	99.3	99.6	99.5	98.4	100.2
Tobacco manufactures	87.9	70.6	79.4	80.4	76.9	76.3	73.1	71.0	69.9	70.3
Textile mill products	80.5	84.6	83.6	84.1	79.6	83.3	84.8	83.7	82.0	83.1
Apparel and other textile products	86.2	86.8	85.1	88.1	85.1	85.9	88.2	86.6	84.4	86.9
Paper and allied products	99.7	100.5	102.8	100.4	99.7	100.0	100.8	100.4	101.7	100.4
Printing and publishing	129.0	131.3	132.4	131.8	128.9	131.1	131.4	131.4	132.1	131.7
Chemicals and allied products	92.0	95.2	96.3	94.7	92.8	92.8	94.5	95.5	95.9	95.6
Petroleum and coal products	83.1	85.6	86.2	84.9	81.8	83.4	84.7	83.4	83.5	83.7
Rubber and miscellaneous plastics products	112.3	114.6	115.5	118.4	112.0	114.8	115.0	115.5	115.2	118.1
Leather and leather products	56.1	62.5	59.8	61.6	55.4	59.7	62.2	61.4	59.2	60.6
Service-producing	129.3	135.7	133.3	133.4	128.8	131.7	132.3	133.1	132.8	133.0
Transportation and public utilities	107.1	110.5	110.3	111.4	106.1	107.6	109.0	109.7	109.0	110.4
Wholesale trade	117.9	119.3	118.5	119.5	116.9	117.6	117.5	118.2	117.6	118.6
Retail trade	118.5	125.9	123.0	121.3	118.6	120.4	121.2	122.4	122.5	121.3
Finance, insurance, and real estate	138.7	145.3	141.8	141.4	139.0	142.7	142.0	143.0	141.3	141.5
Services	147.7	156.0	153.1	154.2	146.9	151.7	152.5	152.9	152.7	153.6

[1] See footnote 1, table B-2.

p = preliminary.

Table B-6. Indexes of diffusion: Percent of industries in which employment[1] increased

Time span	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span	1985	55.9	47.0	52.4	47.3	53.2	46.8	53.8	53.8	47.8	53.2	54.3	57.3
	1986	53.2	48.1	48.1	53.5	52.4	46.8	52.4	56.2	55.1	53.2	59.7	59.7
	1987	59.5	56.8	58.6	58.4	58.6	55.7	68.6	54.6	p64.1	p62.7		
Over 3-month span	1985	51.1	48.6	42.4	46.5	44.3	49.7	47.0	48.6	45.9	47.6	55.1	56.5
	1986	49.7	44.9	45.7	48.4	47.6	45.4	48.4	55.1	55.9	58.1	58.6	60.3
	1987	58.6	59.5	61.1	61.6	61.4	67.3	66.2	p72.4	p67.0			
Over 6-month span	1985	46.5	46.5	43.2	44.3	44.3	45.1	43.0	44.3	49.2	49.2	47.3	45.9
	1986	47.6	47.6	43.0	43.2	45.4	48.4	47.3	53.0	59.2	58.9	57.8	58.9
	1987	61.9	62.7	58.9	67.3	67.6	p69.7	p73.5					
Over 12-month span	1985	44.6	44.1	43.8	40.8	41.6	41.6	42.2	42.4	43.8	44.3	44.1	42.4
	1986	43.2	44.1	45.2	45.7	47.8	49.5	49.5	51.6	54.9	52.2	55.1	56.5
	1987	62.2	63.5	p67.6	p71.1								

[1] Number of employees, seasonally adjusted for 1, 3, and 6 month spans, on payrolls of 185 private nonagricultural industries. Data for the 12-month span are unadjusted.

p = preliminary.

NOTE: Figures are the percent of industries with employment rising. (Half of the unchanged components are counted as rising.) Data are centered within the spans.

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Senator SARBANES. Thank you very much, Commissioner. Let me just pick up on the productivity section at the end of your statement.

Ordinarily, doesn't productivity improve most quickly in the early stages of recovery from a steep recession?

Mrs. NORWOOD. Yes.

Senator SARBANES. To what do you attribute this productivity performance, which you note differs considerably from that in past recoveries, particularly the phenomenon you talk about in your statement?

Mrs. NORWOOD. Well, of course, manufacturing has been doing very well for some time, and that improvement has continued and indeed gotten somewhat larger. Output has increased.

I think it is encouraging that this seems to be spreading a bit, at least to the business sector as a whole, where it clearly had not been before. I don't—perhaps Mr. Mark has something to add to that.

Mr. MARK. That is right. It is predominantly manufacturing generated. In contrast to previous recoveries, manufacturing productivity has gone up 4.8 percent since the trough; whereas, in the average of the previous cycles it was about 2.9 percent. As a result, this has pushed up the total business productivity growth.

Nonmanufacturing is still showing less of an increase than previous recovery periods, so that the growth is predominantly dominated by what has happened to manufacturing, which, in turn, reflects many other things—the competitive pressures and the continued increase in manufacturing production.

Senator SARBANES. As I understand it, on the 20th and 21st of last month, your Business Research Advisory Council recommended a "full-scale review of the Nation's employment and unemployment statistics."

What problems did the Advisory Council find with our current statistics, and do you agree with them on the necessity for a full-scale review of the employment and unemployment statistics?

Mrs. NORWOOD. Yes, I do. In fact, we have already begun such a wide-scale review. We have had a number of meetings with the Census Bureau, which does some of the survey work for us.

I believe that it is time to get started on some of the research that is needed. We always, as you know, revise that survey after the decennial census in order to see to it that the sampling reflects where people live.

I believe that there are a number of areas that require further effort. One is the questionnaire itself. Do people really understand all the questions we are asking them?

I think we can learn a great deal through the use of interdisciplinary approaches to testing—in a cognitive laboratory—which is a lot cheaper, by the way, than testing in the field—whether people really understand the questions.

In my view, the big issues in the labor market are really longitudinal issues. We need to find out what happens to people over time. The existing survey basically uses a cross-sectional approval. It would be possible, however, to develop different kinds of processing methods that could link together the micro data, so that we can follow people over time.

I also believe that recent developments have demonstrated very clearly that there are enormous differences occurring from one part of this country to another and that having accurate data for the country as a whole may not be sufficient for us to understand some of the problems of the labor market. We would like to try to use new approaches to see whether we can improve the data, at least for each of the 50 States.

Further, there is a need to use new technology in the collection process. The Census Bureau and the BLS are testing some of that. All of that work will take some time, and I do want to emphasize that any change that is made in the future in the CPS will only take place after very careful testing and with an adequate overlap sample so that we know what is really happening.

Senator SARBANES. Who makes up the Business Research Advisory Council?

Mrs. NORWOOD. They are representatives of business establishments as well as major groups of business.

Senator SARBANES. Do you have a Labor Research Advisory Council?

Mrs. NORWOOD. Yes.

Senator SARBANES. Separately?

Mrs. NORWOOD. Yes. That is right. They sometimes put together a subcommittee of both for some important issues. On CPI housing we had a committee made up of representatives of labor and of business, for example. But we have a fairly well-developed system. There is a committee for each program area, and then there is a council, and I meet with the council on a regular basis, at least twice a year, sometimes more often, and these are people, I might——

Senator SARBANES. But is there a labor structure that is comparable to the Business Research Advisory Council?

Mrs. NORWOOD. Yes.

Senator SARBANES. OK. And what is the rationale for having them separate instead of having one advisory council in which they both would participate?

Mrs. NORWOOD. They have always been that way. They were established when Ewan Clague became Commissioner more than 40 years ago. Each council speaks with an independent voice. They are complementary to each other, and each has reaffirmed their wish to remain separate and distinct bodies.

I think there is some interchange in that each knows what the other is doing, and they are all technical people. They are business economists and labor economists for the most part, and they have been very helpful to us.

And, by the way, we don't pay them anything, not even their expenses to come to the meetings.

Senator SARBANES. Senator Melcher.

Senator MELCHER. Commissioner, it appears to me that in order to measure economic indicators in the days we are in against the effect on the economy that these twin towering, huge deficits of trade and treasury deficits, that we have no yardstick or history to say whether these indicators we are keeping truly reflect the underlying economy, and I suspect that is true, is it not? It is obvious, is it not?

Mrs. NORWOOD. That depends on the particular series. We have, for example, just revised the Producer Price Index and the Consumer Price Index, the All Urban Index and the Wage Earner Index, and we believe that they now reflect conditions in the economy much better than they did before. So we are quite pleased that we have gone through that process.

We have made changes in the productivity program to develop newer measures that will include the effects of capital and labor into multifactor measures which we think are more relevant to the kinds of problems that we have, including, for example, the effect of energy.

In the employment area, we have done a great deal to improve the accuracy of the basic establishment survey that we are reporting on here today, but we still have a long way to go. In the wage area there are enormous changes going on in the compensation package. Some of them are very difficult to measure, but we are working on that. Also, at the request of the Congress, we have been doing some work to try to develop a new survey of white collar pay, a very important issue.

Another area that we have been working on is one that I believe needs even more work, and that is services. Since we are becoming so much more a service-oriented economy, we need to have a data system that better reflects services.

Senator MELCHER. Services like health care?

Mrs. NORWOOD. Yes.

Senator MELCHER. Insurance?

Mrs. NORWOOD. Yes.

Senator MELCHER. Stock?

Mrs. NORWOOD. Particularly health care, which presents special problems in the price and productivity area because of the problems in measuring output and changes in quality from one time period to another.

Senator MELCHER. When commodity prices for energy and forest products and agriculture and mining and minerals were all going down, the economy seemed to be going up, is that true?

Mrs. NORWOOD. We have had situations where that has occurred.

Senator MELCHER. Is there any correlation if commodity prices for those four basic industries would improve that we would be able to determine just where the economy is?

In other words, this is all pretty basic, but for the last 12 months, October to October, economic indicators were judged to be pretty good, yet these commodity prices were either dropping or just stabilizing at low points. Why was the economy—why did the economic indicators come out as a net plus? Is there too much emphasis in measuring, for instance, stock market rises?

Mrs. NORWOOD. Well, what you are talking about now, I think, is the Leading Indicators Index, which includes as a component what is happening in the stock market, and I would assume that with a change in the stock market that that index might turn around.

The index is based on a number of different kinds of data which in the past have been associated with periods when the economy has been moving either toward expansion or toward contraction. It is revised very frequently, and sometimes the revision even causes a change in direction. It was affected last month by the drop in

hours of work caused by the fact that Labor Day was in the survey week.

But the fact remains that on average, the economy has been expanding. It is true that there are some parts of the country and there are some industries that are in very great difficulty, and it is partly for that reason that I feel that the data system of the future needs to be oriented more toward local areas, toward geographic areas, and toward particular problem groups.

Sometimes we don't serve those groups who are in very great difficulty very well. It is difficult because the more you try to develop data for individual areas the more expensive it becomes because of the larger the samples are that are needed.

Senator MELCHER. Well, it appears to me that from October to October that when you look at agricultural employment, both in wage and salary workers and the self-employed, despite the increase in jobs, that there has been a—well, there was a decline in self-employed workers in agriculture. I believe I am reading this correct.

Mrs. NORWOOD. Yes, roughly, or it has been about the same.

Senator MELCHER. And the wage and salary workers were virtually stable from October to October, a slight improvement.

Mrs. NORWOOD. I think both of those are probably about stable. It is quite clear that the farm community has not benefited from the expansion in the way that other industrial groups have. There is no question about that, and the data show it.

Senator MELCHER. Yet if you try to find out—perhaps in your papers you have them, but if you look down below that, nonagricultural industries, I would like to know what energy, forest products, and mining—what those figures showed, whether it is parallel to agriculture or not.

Mrs. NORWOOD. Well, mining certainly has not fared terribly well. In fact, over the year employment in mining has been fairly stable, increasing by only 27,000.

Construction also has been relatively weak, having gained only 80,000 over the year, which is quite small for that industry generally.

And some of the manufacturing industries over the year have also not done too well, although manufacturing in aggregate has gained about 300,000 jobs over the year.

Senator MELCHER. Thank you.

Senator SARBANES. Commissioner, we have a vote on and both Senator Melcher and I are going to have to go and respond to that.

Let me just very quickly put some questions to you, though.

Mrs. NORWOOD. Fine.

Senator SARBANES. You point out in your statement that the employment-population ratio edged up to 61.7 percent. Is that the highest it has ever been?

Mrs. NORWOOD. It is not an all-time high, but it matches that which occurred about 2 years ago.

Senator SARBANES. How does that compare with other countries? Do we have any figures on that?

Mrs. NORWOOD. We can check that. I don't have that in hand. In some of the countries it does not—it is not as high. Some of them,

like the Scandinavian countries for example—well, I have it right here. Leave it to BLS. We have everything.

As I said, we are not as high as Sweden, but we are higher than most others.

Senator SARBANES. Could you submit that——

Mrs. NORWOOD. Yes.

Senator SARBANES [continuing]. Whatever it is you are looking at for the hearing record that gives us that information?

[The following information was subsequently supplied for the record:]

EMPLOYMENT-POPULATION RATIOS, APPROXIMATING U.S. CONCEPTS, 1972-86

YEAR	UNITED STATES	CANADA	AUSTRALIA	JAPAN	FRANCE	GERMANY	ITALY	NETHER-LANDS	SWEDEN	UNITED KINGDOM
					TOTAL EMPLOYMENT BASIS (1)					
1972	57.5	55.2	61.0	63.0	56.2	56.0	46.4	(2)	62.7	58.7
1973	58.3	56.7	61.5	63.3	56.4	55.8	46.3	47.4	62.7	60.8
1974	58.3	57.5	61.5	62.3	56.4	54.7	46.6	47.1	63.8	60.7
1975	56.5	57.1	60.4	61.3	55.4	53.0	46.5	47.2	65.0	60.2
1976	57.3	56.9	60.0	61.2	55.4	52.5	46.6	46.8	65.1	59.4
1977	58.3	56.8	59.5	61.4	55.4	52.1	46.7	47.0	65.0	59.1
1978	59.7	57.7	58.3	61.4	55.1	52.0	46.3	46.8	64.8	59.2
1979	60.3	58.9	58.1	61.5	54.7	52.2	46.4	47.0	65.5	59.6
1980	59.6	59.5	58.6	61.4	54.2	52.2	46.6	47.6	65.8	58.5
1981	59.4	60.1	58.6	61.3	53.4	51.3	46.4	47.2	65.3	56.1
1982	58.2	57.2	57.5	61.3	53.0	50.1	45.6	46.4	64.9	55.3P
1983	58.3	56.9	55.5	61.5	52.4	49.1	45.1	45.0	64.6	54.7P
1984	59.9	57.6	56.3	61.1	51.6	49.0P	44.9P	44.9	64.7	55.3P
1985	60.5	58.6	56.9	60.8	51.0	49.2P	44.8P	45.9P	65.2	55.7P
1986	61.1	59.5	58.1	60.5	50.9P	49.7P	45.0P	(2)	65.6P	55.6P
					CIVILIAN EMPLOYMENT BASIS (3)					
1972	57.0	54.9	60.6	62.9	55.6	55.5	45.9	(2)	62.4	58.2
1973	57.8	56.4	61.2	63.2	55.8	55.4	45.8	46.8	62.5	60.3
1974	57.8	57.3	61.3	62.2	55.7	54.2	46.2	46.5	63.6	60.3
1975	56.1	56.9	60.1	61.2	54.8	52.5	46.0	46.7	64.8	59.7
1976	56.8	56.7	59.7	61.1	54.8	52.0	46.1	46.3	64.9	59.0
1977	57.9	56.6	59.2	61.2	54.7	51.6	46.3	46.5	64.8	58.7
1978	59.3	57.5	58.0	61.3	54.4	51.5	45.9	46.3	64.6	58.8
1979	59.9	58.7	57.8	61.4	54.0	51.7	45.9	46.4	65.3	59.2
1980	59.2	59.3	58.3	61.3	53.5	51.7	46.1	47.0	65.6	58.1
1981	59.0	59.9	58.4	61.2	52.8	50.8	45.9	46.6	65.1	55.7
1982	57.8	57.0	57.3	61.2	52.3	49.6	45.2	45.8	64.7	55.3P
1983	57.9	56.7	55.3	61.4	51.8	48.6	44.7	44.5	64.4	54.7P
1984	59.5	57.4	56.0	61.0	51.0	48.5P	44.5P	44.3	64.5	55.3P
1985	60.1	58.4	56.6	60.6	50.4	48.7P	44.4P	45.4P	65.0	55.7P
1986	60.7	59.4	57.9	60.4	50.2P	49.1P	44.6P	(2)	65.4P	55.6P

P = PRELIMINARY ESTIMATE.

(1) EMPLOYMENT APPROXIMATING U.S. CONCEPTS AS A PERCENT OF THE NONINSTITUTIONAL WORKING AGE POPULATION, EXCEPT JAPAN AND GERMANY WHERE THE INSTITUTIONALIZED WORKING AGE POPULATION IS INCLUDED.
(2) NOT AVAILABLE.
(3) CIVILIAN EMPLOYMENT APPROXIMATING U.S. CONCEPTS AS A PERCENT OF THE CIVILIAN NONINSTITUTIONAL WORKING AGE POPULATION, EXCEPT JAPAN AND GERMANY WHERE THE INSTITUTIONALIZED WORKING AGE POPULATION IS INCLUDED.

NOTE: THE DATA RELATE TO PERSONS 16 AND OVER IN THE UNITED STATES, FRANCE, AND SWEDEN; 15 AND OVER IN CANADA, AUSTRALIA, JAPAN, AND GERMANY; AND 14 AND OVER IN ITALY. THE LOWER AGE LIMIT WAS RAISED FROM 15 TO 16 IN 1973 FOR THE UNITED KINGDOM AND FROM 14 TO 15 IN 1975 FOR THE NETHERLANDS.

PREPARED BY: U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS, OFFICE OF PRODUCTIVITY AND TECHNOLOGY, AUGUST 1987.

Senator SARBANES. Do we have any information on whether or to what extent this ratio is high because people feel compelled to go into the work force for pressing economic reasons?

Mrs. NORWOOD. No, we don't have data on the motivation of people who work.

Senator SARBANES. Why the unusually large gain in the labor force September to October?

Mrs. NORWOOD. Well, the labor force declined in September. The labor force tends to move in zigs and zags, and you really need to average the data over several months. In August it rose 350,000. In September it declined 441,000, and then it grew 500,000 in October.

Senator SARBANES. Would the September unemployment figure have been higher if the labor force growth had been more consistent—I guess would be the way to put it?

Mrs. NORWOOD. The unemployment figure is, of course, based on employment and the labor force, so changes in the labor force would affect it. But the labor force always moves this way. It will go up in a month, and then it will go down. It moves around, and so you need really to look at it over a period of time.

Over the year it has gone up 2 million.

As I mentioned in my statement about 14 million jobs have been created during this recovery period since November–December of 1982 and the unemployment rate has fallen from 10.8 to 6.0 percent. That is a drop of 4.8 percentage points.

If you think about that, what it shows is that you needed almost 300,000 jobs to take account of each one-tenth in the unemployment rate because of both the increase in the labor force and the increase in the population.

Senator SARBANES. On the import prices, in which you make the point that only about one-half of the decline in the dollar has been passed through as a price increase, that is not bad on the inflation front but it is not very good on the trade deficit front.

Mrs. NORWOOD. That is right.

Senator SARBANES. We heard testimony earlier this week that imports into the United States have declined very little in response to the fall of the dollar because foreign goods are still cheaper than American made goods, and we had a chart presented that showed import prices remaining about 20 percent below domestic prices.

Can you over time show a change in the amount of the pass-through, as profit margins shrink?

In other words, it is clear that foreign exporters have been absorbing some of the change in the currency valuation out of their profit margins. Obviously, as they continue to do that, they will get to the point where it is more and more difficult to absorb.

Mrs. NORWOOD. Yes.

Senator SARBANES. Does your survey show that more of the currency change is being passed through in the price, or don't you have that information?

Mrs. NORWOOD. Most of the discussion thus far seems to be based upon trade-weighted exchange rates. But commodities are traded often with specialization from particular countries, some of which have a very different exchange rate relationship with the dollar—Korea, for example, and Hong Kong, from which we get a lot of textiles. Because of that the Bureau of Labor Statistics staff has

done a lot of what I think is very good work to develop an exchange rate index that is weighted both by commodity groups and by country or origin, and I would be glad to send you some charts that we have developed which show over the last several years what has happened when you look at that, and you see big differences between, say, apparel, on the one hand, and Japanese automobiles, on the other.

I think this will permit us to understand these developments much better. There are, of course, probably some changes that have occurred in this price relationship, depending on how much of a monopoly of the production of particular goods the country had. In some cases where there was more competition there was more price absorption in the foreign country. In other cases there was less.

But I will send you a note with that.

Senator SARBANES. If you could submit that, we would appreciate it.

Mrs. NORWOOD. Be glad to.

Senator SARBANES. That and the other chart on the participation rates in other countries.

Mrs. NORWOOD. Yes, be glad to.

[The following information was subsequently supplied for the record:]

News United States Department of Labor
Bureau of Labor Statistics Washington, D.C. 20212

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USDL--87-508
FOR RELEASE: 2:00 P.M. E.S.T.
Wednesday, November 18, 1987

BLS ANNOUNCES NEW PRICE DATA FOR IMPORTS AND EXPORTS

Foreign manufacturers appear to be absorbing a substantial part of the decline in the trading value of the dollar and, on average, have passed through only about one-half of the dollar's decline in higher prices for their U.S.-bound exports, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. This observation is based on a newly developed series of U.S. export and import price indexes which are measured in foreign currency terms. A specially designed series of average exchange rate indexes, weighted by the relative importance of a given country's trade with the U.S. in each product category, was used in the construction of this new series. A description of the methodology underlying the new series will appear in the December issue of the Monthly Labor Review.

Since the dollar began falling from its peak trading value in March 1985, dollar prices of imports (excluding fuels) have risen 18.8 percent on average. If foreign manufacturers had attempted to compensate completely for the dollar's decline, nonfuel import prices would have been raised by about 34 percent. Chart A shows the index for all imports, excluding fuels, in both dollar and foreign currency terms. The foreign currency price index measures the prices that foreign sellers realize in terms of their own currencies from sales to the United States. The decline in this index since March 1985 suggests that foreign sellers have been willing to absorb a part of the drop in the trading value of the dollar. (See tables 1 and 2.)

The new BLS data also show that changes in the exchange value of the dollar, as well as the rate at which it is passed through or absorbed, vary widely by product area. (See chart B for selected examples.) For instance, in the category of motor vehicles and parts, the trading value of the dollar has declined about 31 percent since March 1985 and about 55 percent of this decline has been passed through as higher dollar prices for these imported products. In contrast, over the same period, the dollar's trading value has declined only about 12 percent in the apparel product category and foreign sellers have been able to pass through roughly 90 percent of this decline. Estimates of the extent of exchange rate pass-throughs by product area may be calculated from data provided in the tables. (See note on page 2.) It is important to note that the new foreign currency denominated indexes, while very useful in analyzing the behavior of prices in U.S. foreign trade, cannot be used to assess the profitability of foreign sellers. Any effort to assess profitability would have to take into consideration additional information such as changes in input costs.

On the export side, (See tables 3 and 4) the declines in the exchange value of the dollar have had a downward impact on prices foreign buyers pay, in their currencies, for U.S. goods. Chart C presents the

price index for all U.S. exports of goods in both dollar and foreign currency terms. The evident stability of the dollar-price index--up only 2.8 percent since March 1985--combined with the sharp drops in the dollar's trade value, translates into a foreign-currency price index for U.S. exports which has declined sharply over the period since March 1985. U.S. exporters, in other words, have on average managed to keep their dollar prices relatively stable and thereby take advantage of the competitive improvement resulting from lower foreign currency prices for their goods.

In general, the export exchange rate series show slightly less variation from one product category to another than is observed for the import categories. (See chart D.) In addition, U.S. exporters appear uniformly to be passing through most of the recent decline in the dollar into lower foreign currency selling prices.

The exchange rate data included in these new series represent data for 41 countries with inflation rates comparable to recent U.S. trends. In the future these indexes will be included with the regular U.S. Import and Export Price Indexes. In addition, the Bureau will also be producing a separate series of foreign currency indexes which will include data from 64 countries and will be adjusted for inflation in foreign countries. The latter series will be made available on a one quarter lag basis. For further information on the foreign currency and exchange rate indexes call Bill Alterman or Dave Johnson at (202) 272-5020.

NOTE: For a given category of U.S. exports, a pass-through figure can be calculated by dividing the change in the average foreign currency price index for that group (from table 3), by the average change in the dollar, as measured by the appropriate exchange rate index (from table 4). For example, for export SITC 71, from March 1985 to September 1987, the foreign currency price declined, on average, 17.7 percent. During the same period, the dollar declined 21.6 percent. Dividing 17.7 percent by 21.6 percent (and multiplying by 100) gives a pass-through estimate of 81.9 percent.

For a given category of U.S. imports, the pass-through figure can be calculated by dividing the change in the dollar price index for that group (from table 1), by the average change of foreign currencies against the dollar (from table 2), as measured by the reciprocal of the appropriate exchange rate index. For example, for import SITC 78, from March 1985 to September 1987 the dollar price index increased 25.2 percent. During the same period, the dollar declined 31.3 percent. The reciprocal of the drop in the dollar produces a foreign currency appreciation of 45.6 percent. Dividing 25.2 percent by 45.6 percent (and multiplying by 100) gives a pass-through estimate of 55.3 percent.

TABLE 1

U.S. Import Dollar Price and Foreign Currency Price Indexes - Nominal
(March 1985=100 unless otherwise specified)

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1974 SITC	Category	1985				1986				1987			
		Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
	ALL COMMODITIES												
	Dollar Index	100.0	99.5	99.4	100.7	96.7	95.0	89.7	92.0	98.0	101.9	103.6	
	Foreign Currency Index	100.0	96.1	95.3	98.0	79.2	73.1	71.5	74.3	79.2	76.7	77.2	
03	ALL COMMODITIES, EX FUELS AND RELATED PRODUCTS 1												
	Dollar Index	100.0	100.5	100.7	103.0	104.6	107.0	110.9	111.7	116.4	117.5	118.0	
	Foreign Currency Index	100.0	96.8	96.2	99.9	87.7	86.8	88.6	89.8	94.1	94.3	94.6	
01	MEAT												
	Dollar Index	100.0	98.6	98.8	100.6	94.1	92.9	97.5	105.1	101.5	104.2	109.6	
	Foreign Currency Index	100.0	89.7	88.6	93.8	84.4	81.8	85.7	91.5	96.9	96.2	98.5	
02	DAIRY PRODUCTS AND EGGS												
	Dollar Index	100.0	99.6	100.8	102.2	102.5	109.0	111.5	115.4	110.8	121.7	121.0	
	Foreign Currency Index	100.0	93.0	92.7	95.6	79.7	88.1	76.8	77.5	75.1	75.2	73.7	
05	FISH												
	Dollar Index	100.0	97.4	97.4	99.8	104.5	109.0	112.6	110.2	121.6	126.0	131.2	
	Foreign Currency Index	100.0	93.5	93.2	96.5	98.5	98.5	100.0	100.2	105.6	108.7	109.0	
04	BAKERY GOODS, PASTA PRODUCTS, GRAIN AND GRAIN PREPARATIONS												
	Dollar Index	100.0	100.4	105.6	107.7	111.5	113.2	116.8	117.8	122.2	125.5	122.5	
	Foreign Currency Index	100.0	96.4	96.7	99.2	98.8	98.6	98.6	98.7	98.6	97.8	96.1	
1	BEVERAGES AND TOBACCO												
	Dollar Index	100.0	100.6	101.2	102.8	104.5	106.0	106.1	107.6	109.5	111.5	111.7	
	Foreign Currency Index	100.0	96.5	95.5	98.6	79.8	80.6	77.6	78.8	79.9	78.9	78.6	
11	BEVERAGES												
	Dollar Index	100.0	100.1	101.2	102.2	104.9	106.5	107.5	109.1	111.2	113.2	113.9	
	Foreign Currency Index	100.0	96.0	95.0	98.6	79.6	80.2	77.7	79.5	79.5	79.2	78.2	
2	CRUDE MATERIALS												
	Dollar Index	100.0	99.6	97.5	97.0	100.2	101.4	100.4	100.8	100.7	114.5	115.5	
	Foreign Currency Index	100.0	96.2	93.1	94.7	94.7	97.6	101.5	101.6	101.7	100.5	100.1	
23	CRUDE RUBBER												
	Dollar Index	100.0	98.5	88.8	94.5	101.5	97.5	99.1	101.2	101.9	100.9	115.2	
	Foreign Currency Index	100.0	97.1	87.9	92.7	97.0	93.2	102.4	111.6	109.5	116.6	122.9	
24	WOOD												
	Dollar Index	100.0	100.2	100.9	98.7	105.6	105.6	100.6	100.5	130.2	111.2	130.4	
	Foreign Currency Index	100.0	100.9	99.9	99.4	100.0	100.0	100.0	100.3	100.1	107.7	112.7	
25	PULP AND WASTE PAPER												
	Dollar Index	100.0	98.7	91.6	92.2	99.2	98.1	102.4	110.5	119.6	106.5	103.7	
	Foreign Currency Index	100.0	94.5	92.5	92.5	99.6	94.0	102.0	109.2	113.0	119.3	118.6	
28	METALLIFEROUS ORES AND METAL SCRAP												
	Dollar Index	100.0	96.9	99.0	99.7	104.5	102.0	102.6	105.5	102.6	110.6	113.0	
	Foreign Currency Index	100.0	97.0	98.1	99.2	102.5	102.6	110.9	100.6	102.6	102.0	100.2	
29	CRUDE VEGETABLE AND ANIMAL MATERIALS, N.E.S.												
	Dollar Index	100.0	100.6	98.2	98.5	99.5	100.1	100.8	100.6	100.7	110.5	100.9	
	Foreign Currency Index	100.0	96.0	93.5	98.1	81.9	82.5	79.6	79.2	81.6	88.7	88.7	
3	FUELS AND RELATED PRODUCTS												
	Dollar Index	100.0	97.6	96.5	98.4	66.7	48.2	48.8	46.5	48.0	44.1	48.0	
	Foreign Currency Index	100.0	92.5	92.0	96.2	66.5	46.2	41.6	82.6	67.8	70.1	75.4	
4	FATS AND OILS												
	Dollar Index	100.0	88.5	84.1	86.5	46.1	48.7	39.5	37.4	86.5	46.4	46.2	
	Foreign Currency Index	100.0	85.5	82.4	85.7	45.2	48.2	39.4	89.0	86.8	89.4	47.1	
42	VEGETABLE OILS												
	Dollar Index	100.0	86.8	82.8	86.6	46.9	41.8	37.6	85.9	86.8	86.8	46.4	
	Foreign Currency Index	100.0	82.9	81.3	82.5	45.4	41.6	37.7	87.0	86.9	89.4	44.1	
5	CHEMICALS AND RELATED PRODUCTS												
	Dollar Index	100.0	99.2	98.7	98.4	98.9	97.5	97.6	97.4	100.2	100.1	100.0	
	Foreign Currency Index	100.0	96.7	95.2	96.8	78.2	76.1	76.9	75.6	79.9	77.2	77.3	
52	INORGANIC CHEMICALS												
	Dollar Index	100.0	98.8	98.2	98.4	96.8	96.8	96.2	96.2	99.9	99.6	99.8	
	Foreign Currency Index	100.0	96.2	97.4	98.5	77.9	76.8	75.8	74.3	67.8	67.1	66.7	
54	MEDICINAL AND PHARMACEUTICAL PRODUCTS												
	Dollar Index	100.0	100.0	100.0	100.4	114.3	134.8	128.1	128.2	126.9	131.1	129.7	
	Foreign Currency Index	100.0	96.3	95.3	98.8	89.4	89.8	89.7	88.8	88.4	88.1	88.8	
55	ESSENTIAL OILS AND PERFUMES												
	Dollar Index	100.0	100.6	106.7	108.8	108.6	109.7	113.8	111.6	108.8	123.4	128.4	
	Foreign Currency Index	100.0	96.7	96.8	98.7	79.4	88.8	89.7	79.8	88.4	91.2	88.4	
56	MANUFACTURED FERTILIZERS												
	Dollar Index	100.0	87.8	88.8	88.3	84.1	88.6	88.2	88.6	86.8	88.7	108.9	
	Foreign Currency Index	100.0	88.2	88.2	88.8	88.7	88.7	77.4	79.2	77.3	79.8	98.9	

See footnotes at end of table.

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U.S. Import Dollar Prices and Foreign Currency Prices Indexes - Material
Month 1985=100 unless otherwise specified

SITC Rev. 2	Category	1985				1986				1987			
		Mar.	June	Sept.	Dec.	Mar	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
58	ARTIFICIAL RESINS AND PLASTIC MATERIALS												
	Dollar Index	100.0	99.7	100.4	101.4	104.2	105.2	104.7	100.4	100.1	111.0	109.0	
	Foreign Currency Index	100.0	98.5	97.7	96.4	83.1	82.0	79.2	80.7	75.6	76.2	74.1	
27	CRUDE MATERIALS AND PRODUCTS, N.E.S.												
	Dollar Index	100.0	99.8	100.8	101.0	104.0	104.4	108.1	107.0	108.5	109.1	112.4	
	Foreign Currency Index	100.0	92.4	88.1	81.5	76.9	76.0	72.7	73.7	69.4	68.9	70.7	
6	MANUFACTURED PRODUCTS												
	Dollar Index	100.0	99.8	100.4	100.2	100.7	101.9	104.3	104.7	106.0	110.7	114.9	
	Foreign Currency Index	100.0	93.9	94.0	88.5	84.0	83.6	82.3	83.0	80.0	81.0	83.7	
61	LEATHER AND FURSKINS												
	Dollar Index	100.0	98.8	101.5	104.4	106.7	108.7	108.9	108.9	110.0	110.7	110.0	
	Foreign Currency Index	100.0	94.3	94.3	92.8	88.7	89.2	89.0	86.7	86.0	88.6	89.0	
62	RUBBER MANUFACTURES												
	Dollar Index	100.0	99.4	98.6	99.0	97.8	98.7	99.0	99.0	100.9	100.7	99.2	
	Foreign Currency Index	100.0	94.1	91.7	87.1	82.1	80.0	76.9	77.6	74.6	72.6	70.7	
63	CORK AND WOOD MANUFACTURES												
	Dollar Index	100.0	99.9	101.7	102.1	107.0	110.7	113.3	117.6	119.0	120.0	119.8	
	Foreign Currency Index	100.0	94.2	100.0	100.0	104.3	106.1	110.3	116.0	113.1	113.7	110.3	
64	PAPER AND PAPERBOARD PRODUCTS												
	Dollar Index	100.0	99.7	100.1	99.1	99.7	99.7	99.9	100.6	100.0	106.7	111.0	
	Foreign Currency Index	100.0	97.5	96.7	90.0	92.9	93.0	92.0	92.9	91.5	93.0	96.0	
65	TEXTILES												
	Dollar Index	100.0	97.8	97.8	98.2	100.6	101.9	103.6	103.0	106.6	107.7	109.8	
	Foreign Currency Index	100.0	94.2	92.9	86.0	82.0	82.9	82.9	81.4	79.8	78.6	79.2	
66	NON-METALLIC MINERAL MANUFACTURES												
	Dollar Index	100.0	98.4	100.2	100.2	106.3	110.0	110.6	114.9	118.7	123.4	126.0	
	Foreign Currency Index	100.0	93.8	93.1	88.7	86.0	88.6	88.4	89.7	88.0	89.7	89.4	
67	IRON AND STEEL												
	Dollar Index	100.0	99.3	98.4	97.8	96.9	97.6	98.3	97.9	101.1	100.0	104.2	
	Foreign Currency Index	100.0	92.0	90.3	81.6	78.6	78.3	77.0	78.1	67.9	68.9	71.1	
68	NON-FERROUS METALS												
	Dollar Index	100.0	100.3	102.0	98.2	96.9	96.3	102.0	99.4	100.6	111.0	119.0	
	Foreign Currency Index	100.0	94.2	93.3	87.6	83.0	81.7	84.4	82.6	78.6	88.2	91.0	
69	METAL MANUFACTURES, N.E.S.												
	Dollar Index	100.0	100.3	101.0	103.6	106.0	108.9	110.0	110.0	113.6	116.6	118.0	
	Foreign Currency Index	100.0	97.6	96.2	92.0	88.7	89.1	89.0	86.3	84.6	82.3	82.2	
	MACHINERY AND TRANSPORT EQUIPMENT												
	Dollar Index	100.0	101.0	101.9	100.0	109.7	113.0	116.2	118.3	121.9	124.1	124.6	
	Foreign Currency Index	100.0	97.2	96.6	89.9	87.2	87.0	88.1	87.9	88.3	88.7	86.1	
	MACHINERY (INCLUDING SITC 71 - 77) *												
	Dollar Index	100.0	101.4	102.7	100.1	109.0	113.2	116.0	117.0	121.2	123.3	123.3	
	Foreign Currency Index	100.0	97.2	96.3	89.0	88.7	86.0	89.3	86.2	88.9	88.8	86.1	
71	MACHINERY SPECIALIZED FOR PARTICULAR INDUSTRIES												
	Dollar Index	100.0	100.0	100.4	100.0	116.0	120.0	124.0	122.0	130.0	130.1	127.1	
	Foreign Currency Index	100.0	93.0	91.6	88.0	87.2	87.0	88.7	86.0	88.1	88.0	84.7	
72	METALWORKING MACHINERY												
	Dollar Index	100.0	104.9	104.2	113.7	121.7	124.0	128.3	124.1	141.0	146.1	138.2	
	Foreign Currency Index	100.0	97.6	93.6	91.6	89.2	88.2	84.6	89.0	88.7	88.8	92.2	
74	GENERAL INDUSTRIAL MACHINERY, PARTS N.E.S.												
	Dollar Index	100.0	102.1	102.7	104.9	116.6	122.2	126.0	127.7	130.1	127.9	127.0	
	Foreign Currency Index	100.0	97.6	95.0	92.1	92.6	92.7	92.9	92.0	91.0	91.6	90.1	
75	OFFICE MACHINES AND AUTOMATIC DATA PROCESSING EQUIPMENT												
	Dollar Index	100.0	99.0	100.0	104.6	108.1	110.1	114.6	114.3	110.2	110.0	110.2	
	Foreign Currency Index	100.0	93.6	94.1	88.3	84.0	83.8	81.7	80.2	79.1	79.0	78.8	
76	TELECOMMUNICATIONS, SOUND RECORDERS AND REPRODUCING EQUIPMENT												
	Dollar Index	100.0	98.7	98.1	98.6	99.1	101.0	104.1	104.3	100.1	104.1	104.6	
	Foreign Currency Index	100.0	91.1	92.0	88.2	76.9	76.8	72.6	74.0	71.3	68.7	68.2	
77	ELECTRIC MACHINERY AND EQUIPMENT												
	Dollar Index	100.0	100.2	99.1	101.2	102.9	106.6	107.0	111.7	114.0	118.0	116.7	
	Foreign Currency Index	100.0	99.0	93.6	88.0	88.9	87.2	88.4	88.3	88.0	88.4	88.2	
78	ROAD VEHICLES AND PARTS												
	Dollar Index	100.0	100.0	101.1	100.7	110.7	114.0	116.4	119.0	122.9	126.8	128.2	
	Foreign Currency Index	100.0	97.0	94.2	90.0	88.0	88.6	86.1	89.7	86.7	88.6	86.0	
8	MISC. MANUFACTURED ARTICLES												
	Dollar Index	100.0	101.0	102.7	103.9	106.0	108.0	112.9	113.0	117.0	121.0	123.0	
	Foreign Currency Index	100.0	98.2	98.6	94.8	92.6	92.6	93.2	93.2	93.1	93.0	93.4	
8	MISC. MANUFACTURED ARTICLES EX. GOLD AND SILVER COINS *												
	Dollar Index	100.0	100.1	101.0	102.1	102.4	107.1	110.1	110.6	114.9	118.0	120.1	
	Foreign Currency Index	100.0	97.9	98.0	94.6	92.1	92.2	91.6	91.7	91.6	91.1	91.2	

See footnotes at end of table.

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U.S. Import Dollar Price and Foreign Currency Price Indexes - Nominal
(March 1988=100 unless otherwise specified)

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1976 SITC	Category	1988				1989				1990			
		Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
61	FLOORING, HEATING AND LIGHTING FIXTURES												
	Dollar Index	100.0	100.2	100.4	101.0	102.6	103.4	119.2	110.2	110.2	114.7	118.1	
	Foreign Currency Index	100.0	99.0	100.0	99.2	99.2	97.0	97.5	98.3	98.8	97.9	99.1	
62	FURNITURE AND PARTS												
	Dollar Index	100.0	101.0	103.7	104.2	107.7	110.2	112.2	112.4	116.7	117.5	119.6	
	Foreign Currency Index	100.0	99.0	99.1	98.4	98.0	99.1	99.2	98.6	98.9	98.9	98.1	
63	TRAVEL GOODS, HANDBAGS, AND SIMILAR GOODS (6/88=100)												
	Dollar Index	--	100.0	97.7	97.8	100.9	101.9	103.1	105.2	105.8	106.5	109.6	
	Foreign Currency Index	--	100.0	97.9	98.8	98.6	98.5	99.4	98.9	99.1	98.7	97.7	
84	CLOTHING												
	Dollar Index	100.0	98.0	98.6	98.6	97.6	99.0	100.8	101.8	106.6	110.6	111.7	
	Foreign Currency Index	100.0	97.2	97.8	98.7	98.6	99.5	99.5	98.8	97.1	97.0	98.7	
85	FOOTWEAR												
	Dollar Index	100.0	99.8	100.6	100.9	107.0	108.8	108.1	108.9	109.6	111.6	113.6	
	Foreign Currency Index	100.0	98.8	100.1	98.7	97.8	98.6	97.8	97.8	98.9	98.9	98.7	
87	PROFESSIONAL, SCIENTIFIC AND CONTROLLING INSTRUMENTS AND APPARATUS												
	Dollar Index	100.0	100.0	130.0	134.0	119.3	126.1	132.6	132.3	140.8	148.8	142.4	
	Foreign Currency Index	100.0	97.9	99.9	99.2	98.8	98.4	98.8	99.0	99.6	99.1	99.6	
88	PHOTOGRAPHIC APPARATUS AND SUPPLIES, OPTICAL GOODS, WATCHES AND CLOCKS												
	Dollar Index	100.0	100.7	102.5	105.3	111.7	116.1	119.2	121.0	123.0	126.7	127.5	
	Foreign Currency Index	100.0	99.0	99.2	98.5	98.2	98.7	98.8	98.8	98.7	98.1	98.4	
89	MISC. MANUFACTURED ARTICLES, N.E.S.												
	Dollar Index	100.0	100.4	102.7	107.5	110.8	119.4	123.1	121.7	123.8	123.6	130.6	
	Foreign Currency Index	100.0	100.0	99.2	99.8	98.2	98.7	98.8	98.8	98.8	99.6	97.8	
89	MISC. MANUFACTURED ARTICLES, N.E.S. EX. GOLD AND SILVER GOODS [1]												
	Dollar Index	100.0	102.6	102.7	105.8	110.1	110.8	114.4	114.3	121.1	122.4	128.8	
	Foreign Currency Index	100.0	99.8	98.6	98.3	98.0	98.8	98.1	98.1	97.2	97.6	98.6	

1 Product categories included in this SITC have been modified due to nonavailabilities or coverage limitations.

n.o.s. Not elsewhere specified.
n.a. Not available.

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TABLE 2

Average Exchange Rates
Imports
(March 1985=100 unless otherwise specified)

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1976 SITC	Category	1985				1986				1987			
		Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
	ALL COMMODITIES	100.0	96.6	93.9	88.2	85.6	82.1	79.8	80.9	76.7	75.1	74.5	
EX	ALL COMMODITIES, EX FUELS AND RELATED PRODUCTS [1]	100.0	96.5	93.6	87.2	82.2	80.5	77.2	77.7	73.5	71.9	71.2	
01	Meat	100.0	98.9	98.0	93.5	89.7	90.0	91.2	88.5	83.0	82.7	82.4	
02	Dairy products and eggs	100.0	95.5	88.0	79.8	75.4	73.8	69.0	68.1	63.2	62.4	62.6	
03	Fish	100.0	98.1	96.5	93.6	91.0	90.6	88.8	89.0	86.2	83.9	83.1	
04	Bakery goods, pasta products, grain and grain preparations	100.0	96.0	95.5	89.4	88.9	88.2	82.8	82.1	77.5	77.4	77.0	
1	BEVERAGES AND TOBACCO	100.0	98.9	88.5	81.8	76.4	76.1	73.1	72.5	67.8	67.2	66.0	
11	Beverages	100.0	92.7	88.0	81.1	73.8	75.5	72.4	71.8	66.8	66.8	66.1	
2	CRUDE MATERIALS	100.0	98.4	97.7	97.6	96.2	96.2	97.3	97.0	92.7	91.8	91.8	
25	Crude rubber	100.0	98.7	98.0	96.1	95.5	98.0	104.3	110.3	107.4	107.0	106.7	
24	Wood	100.0	98.8	99.0	100.7	101.2	100.4	100.5	99.0	98.8	96.8	98.2	
25	Pulp and waste paper	100.0	98.7	98.6	100.2	100.8	99.7	99.4	98.9	96.5	98.8	96.2	
28	Metalliferous ores and metal scrap	100.0	100.9	99.1	99.6	96.9	98.0	102.1	99.0	94.5	93.1	91.0	
29	Crude vegetable and animal materials, n.e.s.	100.0	98.4	91.9	86.5	82.6	82.2	79.0	79.0	78.8	76.5	76.1	
3	FUELS AND RELATED PRODUCTS	100.0	97.7	96.6	96.6	96.7	97.7	102.7	113.6	111.7	112.1	110.8	
4	FATS AND OILS	100.0	97.7	97.5	98.4	98.2	98.9	99.0	101.0	98.8	98.3	98.4	
42	Vegetable oils	100.0	97.7	97.6	98.8	98.8	99.6	100.7	102.0	99.9	99.6	99.6	
5	CHEMICALS AND RELATED PRODUCTS	100.0	96.8	98.6	96.1	79.1	78.1	76.7	76.6	69.8	69.1	68.6	
52	Inorganic chemicals	100.0	98.6	93.7	87.3	88.3	88.1	86.8	79.6	75.1	76.9	76.2	
54	Medicinal and pharmaceutical products	100.0	92.7	87.8	88.3	75.1	75.8	70.5	70.7	65.8	64.8	64.6	
55	Essential oils and perfumes	100.0	93.8	88.4	88.9	78.2	78.8	71.4	71.1	66.8	68.8	65.4	
56	Manufactured fertilizers	100.0	97.9	97.1	97.8	96.8	98.4	96.2	97.4	89.8	89.9	88.6	
58	Artificial resins and plastic materials	100.0	98.6	98.1	88.2	79.7	77.9	76.2	76.4	69.8	68.1	67.5	
59	Chemical materials and products, n.e.s.	100.0	98.1	87.4	79.8	76.8	72.9	69.2	68.9	64.8	63.1	62.8	
6	INTERMEDIATE MANUFACTURED PRODUCTS	100.0	96.4	95.6	88.1	83.4	82.8	78.9	79.3	76.9	75.6	72.4	
61	Leather and furskins	100.0	98.7	95.1	88.6	86.8	86.4	81.7	81.9	77.9	76.1	73.5	
62	Rubber manufactures	100.0	96.5	96.1	88.8	82.9	81.1	77.7	78.2	73.9	72.1	71.2	
63	Cork and wood manufactures	100.0	101.3	99.1	98.8	96.7	98.8	97.5	98.6	98.8	92.6	91.1	
64	Paper and paperboard products	100.0	97.6	96.8	98.6	96.2	95.5	96.1	91.7	87.1	87.7	86.4	
65	Textiles	100.0	96.4	95.7	87.6	82.8	81.4	78.1	78.5	74.7	72.8	72.5	
66	Non-metallic mineral manufactures	100.0	98.8	91.1	84.3	78.9	77.7	73.9	74.2	69.9	68.7	68.5	
67	Iron and steel	100.0	98.7	91.7	83.6	77.0	75.1	71.0	71.6	67.2	65.6	65.1	
68	Non-ferrous metals	100.0	96.8	95.2	89.2	85.8	84.8	82.8	82.9	78.1	77.7	76.8	
69	Metal manufactures, n.e.s.	100.0	97.2	96.8	88.8	83.7	81.9	78.2	78.5	74.6	71.9	70.9	
7	MACHINERY AND TRANSPORT EQUIPMENT	100.0	96.2	92.9	88.2	79.6	77.1	75.2	76.3	69.9	68.2	67.6	
7	MACHINERY (INCLUDING SITC 71 - 77) [1]	100.0	96.2	92.8	88.6	78.7	76.4	72.6	73.5	69.3	67.2	66.6	
72	Machinery specialized for particular industries	100.0	96.2	89.5	83.2	76.6	75.8	68.7	69.0	66.2	65.8	62.7	
73	Metalworking machinery	100.0	98.8	98.3	88.6	73.3	70.7	68.9	67.8	62.5	60.8	60.1	
74	General industrial machinery, parts n.e.s.	100.0	98.4	91.6	85.8	77.9	73.9	71.9	72.6	67.9	66.3	65.8	
75	Office machines and automatic data processing equipment	100.0	96.6	98.6	89.5	78.1	78.6	71.6	72.9	68.9	66.5	65.9	
76	Telecommunications, sound recording and reproducing equipment	100.0	97.6	96.5	89.5	77.5	76.2	69.5	71.7	67.8	66.8	66.1	
77	Electric machinery and equipment	100.0	96.9	96.6	87.7	82.6	81.8	78.3	79.0	75.2	73.1	72.5	
78	Road vehicles and parts	100.0	96.6	93.2	86.6	80.5	77.8	76.8	78.1	70.5	69.3	68.7	
8	MISC. MANUFACTURED ARTICLES	100.0	97.5	98.8	91.9	86.9	88.7	86.6	88.5	79.8	78.4	78.4	
9	MISC. MANUFACTURED ARTICLES EX. GOLD AND SILVER COINS [1]	100.0	97.8	96.3	91.4	87.4	86.1	85.8	86.9	79.8	78.8	78.8	
81	Plumbing, heating and lighting fixtures	100.0	98.5	97.2	93.4	89.4	88.4	86.9	83.8	80.3	76.3	76.8	
82	Furniture and parts	100.0	97.2	98.6	91.8	88.5	87.2	86.1	88.3	79.1	77.9	76.9	
83	Travel goods, handbags, and similar goods (A/86=100)	100.1	100.0	100.2	97.6	96.9	93.7	98.6	89.2	86.6	81.5	80.9	
84	Clothing	100.0	99.3	99.6	97.5	98.7	98.5	98.7	98.4	91.2	88.4	87.4	
85	Footwear	100.0	99.0	98.7	98.0	96.8	98.2	86.8	88.1	82.0	77.9	76.5	
87	Professional, scientific and controlling instruments and apparatus	100.0	96.6	98.2	92.1	76.1	74.1	70.5	71.1	66.6	66.8	66.6	
88	Photographic apparatus and supplies, optical goods, watches and clocks	100.0	98.9	91.9	85.0	76.6	75.9	69.5	70.6	66.6	66.8	66.1	
89	Misc. manufactured articles, n.e.s.	100.0	96.6	93.9	88.8	83.5	81.8	78.3	78.6	76.8	72.3	71.6	
89	Misc. manufactured articles, n.e.s. ex. gold and silver coins [1]	100.0	97.2	98.1	89.2	86.3	82.7	79.1	79.1	78.8	75.1	72.3	

1 Product categories included in this SITC have been modified due to nonavailability or coverage limitations.

n.e.s. Not elsewhere specified.
n.a. Not available.

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TABLE 3

U.S. Export Dollar Price and Foreign Currency Price Indexes - Nominal
(March 1985=100 unless otherwise specified)

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1974 SITC	Category	1985				1986				1987			
		Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
	ALL COMMODITIES												
	Dollar Index	100.0	100.0	99.6	99.2	99.5	99.2	97.6	98.7	99.7	100.8	100.0	
	Foreign Currency Index	100.0	96.5	92.6	89.4	84.6	83.6	79.9	81.2	77.0	79.0	78.0	
0	FOOD												
	Dollar Index	100.0	98.1	96.2	97.7	96.5	93.4	88.6	89.8	85.3	87.1	88.0	
	Foreign Currency Index	100.0	95.0	88.4	86.9	77.0	74.5	64.7	66.9	62.7	65.9	66.6	
01	MEAT												
	Dollar Index	100.0	100.0	102.1	100.0	107.3	110.6	117.6	118.0	120.0	124.2	123.1	
	Foreign Currency Index	100.0	97.1	94.6	90.1	82.3	81.7	82.0	89.6	89.3	93.5	92.3	
05	FISH												
	Dollar Index	100.0	102.6	101.6	100.8	101.2	106.1	110.1	115.7	117.3	121.7	123.0	
	Foreign Currency Index	100.0	98.7	95.6	92.5	78.3	78.7	73.6	79.8	78.8	78.8	77.3	
05	FRUITS AND VEGETABLES												
	Dollar Index	100.0	100.6	106.2	99.5	96.8	108.5	110.0	118.4	109.5	109.3	103.0	
	Foreign Currency Index	100.0	97.0	99.5	87.6	80.7	86.6	87.3	89.3	82.9	81.0	76.2	
08	ANIMAL FEEDS, EX. UNMILLED CEREALS												
	Dollar Index	100.0	94.2	104.0	116.6	121.6	117.4	123.9	120.1	117.7	128.7	126.9	
	Foreign Currency Index	100.0	88.8	92.8	95.1	91.3	86.7	88.6	92.3	78.4	91.5	88.0	
09	MISC. FOOD PRODUCTS												
	Dollar Index	100.0	98.7	97.7	97.4	98.8	96.7	96.4	97.8	98.2	99.3	98.9	
	Foreign Currency Index	100.0	94.8	94.3	90.9	87.4	85.9	84.8	89.6	87.1	87.3	86.1	
1	BEVERAGES AND TOBACCO												
	Dollar Index	100.0	100.2	99.8	98.7	98.7	96.4	96.4	101.7	101.8	100.1	100.2	
	Foreign Currency Index	100.0	96.9	91.6	85.7	76.0	75.7	73.9	76.0	72.0	72.4	72.3	
11	BEVERAGES												
	Dollar Index	100.0	101.5	97.9	97.8	98.8	99.8	98.3	98.9	100.7	100.6	100.4	
	Foreign Currency Index	100.0	98.1	92.3	87.5	84.8	86.9	82.4	88.8	88.8	89.4	78.4	
12	TOBACCO AND TOBACCO PRODUCTS												
	Dollar Index	100.0	100.1	100.8	98.9	98.6	96.6	96.3	101.9	101.9	100.8	100.8	
	Foreign Currency Index	100.0	98.8	91.8	85.6	75.5	73.2	71.5	73.6	71.6	72.2	72.1	
2	CRUDE MATERIALS												
	Dollar Index	100.0	99.3	98.7	99.9	98.5	98.1	96.7	97.2	99.6	109.8	111.9	
	Foreign Currency Index	100.0	95.7	89.1	81.3	70.4	76.8	70.3	72.9	70.4	79.8	79.2	
21	RAW HIDES AND SKINS												
	Dollar Index	100.0	104.3	106.6	118.6	134.8	125.1	114.8	122.6	139.3	128.8	126.3	
	Foreign Currency Index	100.0	102.3	102.6	104.1	97.3	102.8	98.3	97.5	108.7	118.3	112.7	
22	OILSEEDS												
	Dollar Index	100.0	100.3	98.6	98.8	96.2	92.7	98.8	88.6	88.1	95.6	98.6	
	Foreign Currency Index	100.0	96.6	88.4	84.1	71.8	68.2	84.7	81.6	88.9	81.1	86.7	
23	CRUDE RUBBER FAS												
	Dollar Index	100.0	99.9	100.7	99.6	99.6	99.7	99.8	98.1	99.8	101.8	102.4	
	Foreign Currency Index	100.0	95.6	92.6	88.8	88.8	79.9	76.2	78.1	71.7	71.6	72.1	
24	WOOD												
	Dollar Index	100.0	97.7	96.7	99.5	100.8	100.8	100.8	105.3	100.8	110.6	109.2	
	Foreign Currency Index	100.0	93.7	90.8	86.1	77.5	76.8	73.8	78.8	75.3	78.5	87.8	
25	PULP AND WASTE PAPER												
	Dollar Index	100.0	98.6	95.3	92.2	98.3	109.2	119.2	120.6	132.3	130.8	101.9	
	Foreign Currency Index	100.0	91.8	86.8	78.3	77.8	86.9	88.4	89.8	92.9	94.3	78.8	
26	TEXTILE FIBERS												
	Dollar Index	100.0	105.3	101.2	98.4	99.2	96.3	72.9	98.8	97.4	110.3	116.4	
	Foreign Currency Index	100.0	100.7	96.4	88.3	84.8	88.2	89.8	73.3	78.9	88.8	87.3	
27	CRUDE MINERALS												
	Dollar Index	100.0	101.4	102.3	99.9	101.4	100.3	99.2	98.3	98.8	98.7	98.8	
	Foreign Currency Index	100.0	98.8	98.7	87.5	83.7	81.5	77.6	77.1	69.6	88.3	88.8	
28	METAL ORES AND METAL SCRAP												
	Dollar Index	100.0	91.9	89.8	88.2	95.5	98.2	96.8	98.5	98.2	101.7	111.8	
	Foreign Currency Index	100.0	88.4	85.8	78.9	78.3	79.8	78.1	80.3	88.6	78.7	77.8	
3	FUELS AND RELATED PRODUCTS												
	Dollar Index	100.0	99.1	97.5	94.5	91.8	86.6	88.6	86.6	88.8	84.3	83.8	
	Foreign Currency Index	100.0	95.3	90.8	83.6	78.7	69.3	68.8	68.8	64.1	68.3	68.8	
5	CHEMICALS AND RELATED PRODUCTS												
	Dollar Index	100.0	99.8	100.1	99.6	99.5	98.4	96.8	98.1	99.6	106.3	107.3	
	Foreign Currency Index	100.0	96.1	93.3	87.2	88.8	81.2	78.6	76.2	78.7	79.6	79.7	
51	ORGANIC CHEMICALS												
	Dollar Index	100.0	102.9	105.8	101.7	99.7	98.2	95.8	98.8	106.1	121.9	119.6	
	Foreign Currency Index	100.0	99.2	96.8	88.7	81.9	77.8	72.9	76.8	77.9	87.8	86.3	
54	MEDICINAL AND PHARMACEUTICAL PRODUCTS (12/82=100)												
	Dollar Index	--	--	--	100.8	99.4	101.8	100.6	100.2	100.6	100.6	101.2	
	Foreign Currency Index	--	--	--	100.8	98.2	91.9	87.2	87.3	82.1	88.8	88.8	
55	ESSENTIAL OILS, POLISH, & CLEANING PREPS												
	Dollar Index	100.0	99.8	100.5	100.8	102.4	106.7	105.5	104.8	104.6	104.7	104.8	
	Foreign Currency Index	100.0	95.8	94.8	89.5	88.5	91.5	89.8	89.2	86.4	88.8	86.3	

See footnotes at end of table.

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U.S. Export Dollar Prices and Foreign Currency Prices Indexes - Nominal
(March 1968=100 unless otherwise specified)

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1976 SITC	Category	1985				1986				1987			
		Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
56	FERTILIZERS, MANUFACTURED												
	Dollar Index	100.0	98.0	97.1	97.5	95.0	93.0	85.7	76.5	81.5	86.9	98.1	
	Foreign Currency Index	100.0	92.4	92.4	89.7	88.9	81.8	76.6	66.9	70.9	76.7	81.9	
58	ARTIFICIAL RESINS, PLASTICS, & CELLULOSE												
	Dollar Index	100.0	99.8	100.0	99.8	101.7	99.8	98.1	99.8	105.0	112.9	119.0	
	Foreign Currency Index	100.0	96.0	95.1	87.9	88.8	82.9	79.8	81.8	89.7	98.6	99.0	
59	CHEMICAL MATERIALS AND PRODUCTS, N.E.S.												
	Dollar Index	100.0	99.7	99.7	99.8	100.2	100.2	98.9	98.7	98.8	99.1	98.8	
	Foreign Currency Index	100.0	96.8	98.8	91.8	89.7	91.6	86.8	86.7	88.5	82.2	81.2	
6	INTERMEDIATE MANUFACTURED PRODUCTS												
	Dollar Index	100.0	99.8	99.8	99.7	100.9	101.8	107.8	105.5	108.8	107.6	109.2	
	Foreign Currency Index	100.0	96.7	96.6	90.8	88.8	88.6	87.6	88.4	88.4	86.7	87.2	
61	LEATHER AND TANNING												
	Dollar Index	100.0	96.8	92.8	98.2	94.5	100.8	102.1	106.7	116.7	122.8	129.8	
	Foreign Currency Index	100.0	94.1	89.8	88.8	84.8	88.6	87.6	91.2	98.8	98.8	96.5	
62	RUBBER MANUFACTURES												
	Dollar Index	100.0	99.2	98.7	99.8	100.8	99.9	100.1	100.7	101.3	102.8	103.3	
	Foreign Currency Index	100.0	96.6	96.8	92.8	91.2	98.8	88.9	89.2	88.4	86.2	86.1	
64	PAPER AND PAPERBOARD PRODUCTS												
	Dollar Index	100.0	97.8	96.8	98.6	98.2	102.6	106.6	108.5	112.8	114.6	117.7	
	Foreign Currency Index	100.0	93.1	91.6	87.8	86.2	88.7	90.7	92.9	91.9	92.8	94.1	
66	NON-METALLIC MINERAL MANUFACTURES (9/68=100)												
	Dollar Index	--	--	100.8	100.2	100.9	101.7	103.2	104.6	105.1	107.7	108.6	
	Foreign Currency Index	--	--	100.9	96.7	94.2	96.8	92.7	94.8	98.7	93.8	91.6	
67	IRON AND STEEL												
	Dollar Index	100.8	99.8	100.6	102.8	103.8	104.1	104.9	104.8	106.5	106.5	107.2	
	Foreign Currency Index	100.8	96.9	96.8	94.8	94.2	94.8	90.8	90.8	91.8	91.7	91.6	
68	NON-FERROUS METALS												
	Dollar Index	100.8	99.9	100.1	98.1	100.6	99.2	99.6	98.9	100.8	113.8	118.7	
	Foreign Currency Index	100.8	96.8	95.8	88.1	88.3	79.2	78.3	78.2	73.1	88.7	88.9	
69	METAL MANUFACTURES, N.E.S.												
	Dollar Index	100.8	99.8	100.8	99.1	99.9	100.1	100.2	100.3	100.5	100.2	100.8	
	Foreign Currency Index	100.8	96.8	96.8	91.4	89.8	89.6	88.5	89.8	88.9	86.8	86.1	
7	MACHINERY AND TRANSPORT EQUIPMENT, EX. MILITARY AND COMMERCIAL AIRCRAFT [1]												
	Dollar Index	100.8	100.6	100.6	100.7	101.2	101.3	101.6	101.2	102.7	102.1	103.6	
	Foreign Currency Index	100.8	97.1	96.9	91.9	87.6	89.8	87.7	88.2	84.1	85.9	85.3	
7	MACHINERY (EXCLUDING SITC 71 - 72) [1]												
	Dollar Index	100.8	100.6	100.6	100.1	100.6	100.6	100.7	101.2	101.8	101.8	102.2	
	Foreign Currency Index	100.8	96.2	95.2	88.6	88.8	88.6	86.9	88.5	79.6	78.6	78.2	
71	POWER GENERATING MACHINERY AND EQUIPMENT												
	Dollar Index	100.8	101.3	101.1	101.3	102.3	102.6	102.5	103.7	104.7	103.9	104.9	
	Foreign Currency Index	100.8	97.6	96.8	91.2	88.7	88.6	86.6	87.6	83.8	84.3	84.3	
72	MACHINERY SPECIALIZED FOR PARTICULAR INDUSTRIES												
	Dollar Index	100.8	100.8	100.6	100.8	100.3	99.8	100.8	100.8	99.8	100.6	101.8	
	Foreign Currency Index	100.8	97.1	96.7	91.2	87.8	86.9	85.9	86.8	82.8	81.8	82.6	
73	METALWORKING MACHINERY												
	Dollar Index	100.8	101.1	101.9	102.3	102.7	103.6	104.6	104.8	107.6	108.1	109.6	
	Foreign Currency Index	100.8	97.6	98.8	92.6	89.9	88.9	88.8	89.8	86.8	85.8	85.8	
74	GENERAL INDUSTRIAL MACHINERY, PARTS N.E.S												
	Dollar Index	100.8	99.7	100.8	99.9	99.9	100.6	101.3	101.9	103.5	103.8	103.6	
	Foreign Currency Index	100.8	96.7	96.6	91.8	89.3	89.8	89.8	90.8	87.1	86.6	86.8	
75	OFFICE MACHINES AND AUTOMATIC DATA PROCESSING EQUIPMENT												
	Dollar Index	100.8	99.1	99.8	98.8	99.8	98.3	98.8	97.2	98.2	98.1	96.6	
	Foreign Currency Index	100.8	95.9	89.9	83.6	79.8	78.1	75.8	76.8	68.8	67.7	66.9	
76	TELECOMMUNICATIONS, SOUND RECORDING AND REPRODUCING EQUIPMENT												
	Dollar Index	100.8	100.8	100.6	100.9	102.6	102.8	103.6	104.3	106.8	105.6	106.9	
	Foreign Currency Index	100.8	96.7	96.8	90.9	89.8	88.9	87.6	88.7	88.6	86.8	85.6	
77	ELECTRICAL MACHINERY AND EQUIPMENT												
	Dollar Index	100.8	101.8	100.3	99.8	100.2	99.6	99.6	100.8	101.8	102.2	102.3	
	Foreign Currency Index	100.8	96.9	95.3	87.6	86.2	85.9	83.8	84.2	79.2	78.8	78.8	
78	ROAD VEHICLES AND PARTS												
	Dollar Index	100.8	100.6	100.8	101.6	101.8	102.8	102.6	103.6	103.7	104.1	104.4	
	Foreign Currency Index	100.8	99.1	98.7	100.3	100.3	100.3	99.9	100.6	98.9	97.3	96.8	
79	OTHER TRANSPORT EQUIPMENT, EX. MILITARY AND COMMERCIAL AIRCRAFT [1]												
	Dollar Index	100.8	100.6	101.9	102.7	104.8	108.8	106.1	107.3	108.1	109.8	110.3	
	Foreign Currency Index	100.8	98.6	97.8	98.2	95.1	94.9	94.8	96.8	93.8	93.6	92.7	
8	MISC. MANUFACTURED ARTICLES												
	Dollar Index	100.8	100.9	100.8	100.8	101.1	101.9	104.6	104.8	105.8	107.8	108.2	
	Foreign Currency Index	100.8	96.5	92.7	87.8	88.2	88.8	85.3	85.7	79.6	80.8	79.7	

See footnotes at end of table.

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U.S. Export Dollar Price and Foreign Currency Price Indexes - Montreal
(March 1988=100 unless otherwise specified)

-9-

1976 SITC	Category	1988				1989				1990			
		Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
82	FURNITURE AND PARTS												
	Dollar Index	100.0	101.0	101.0	102.0	104.0	104.0	102.1	102.9	102.8	102.8	102.8	
	Foreign Currency Index	100.0	98.0	97.7	96.9	96.2	95.7	95.0	95.0	95.2	95.9	95.1	
87	PROFESSIONAL, SCIENTIFIC AND CONTROLLING INSTRUMENTS AND APPARATUS												
	Dollar Index	100.0	101.6	101.0	101.9	103.0	104.7	104.7	104.3	104.2	107.6	108.4	
	Foreign Currency Index	100.0	98.0	98.3	97.4	94.5	94.3	91.0	92.4	93.2	97.9	95.0	
88	PHOTOGRAPHIC APPARATUS AND SUPPLIES, OPTICAL GOODS, WATCHES AND CLOCKS												
	Dollar Index	100.0	100.9	99.6	102.6	102.0	102.0	100.7	102.1	104.2	105.0	101.2	
	Foreign Currency Index	100.0	98.2	96.2	94.8	92.3	92.0	89.5	91.2	93.1	95.0	91.4	
89	MISC. MANUFACTURED ARTICLES, N.E.S.												
	Dollar Index	100.0	100.6	100.8	100.0	100.3	100.5	100.6	100.7	104.2	110.5	111.0	
	Foreign Currency Index	100.0	98.2	98.3	96.2	97.6	96.6	96.3	96.7	98.1	99.5	94.5	

1 Product categories included in this SITC have been modified due to concordance or coverage limitations.

n.e.s. Not elsewhere specified.
n.a. Not available.

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TABLE 4

Average Exchange Rates
Exports
(March 1985=100 unless otherwise specified)

-10-

1974 SITC	Category	1985				1986				1987			
		Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
	ALL COMMODITIES	100.0	96.5	95.0	89.1	88.5	86.5	82.0	82.5	78.1	77.1	76.4	
0	FOOD	100.0	96.8	95.9	86.9	81.5	79.8	76.4	79.0	75.3	73.4	72.8	
01	Meat	100.0	96.4	92.7	83.4	76.7	76.0	69.9	71.7	67.6	68.7	68.2	
03	Fish	100.0	96.2	92.2	81.9	78.4	71.8	66.9	69.8	64.6	62.5	61.8	
05	Fruits and vegetables	100.0	96.4	93.5	88.0	83.7	82.3	79.4	80.8	75.7	76.7	76.1	
08	Animal feeds, ex. unmilled cereals	100.0	94.2	89.2	81.3	78.1	75.9	69.1	68.5	64.1	63.3	63.8	
09	Misc. food products	100.0	98.0	96.5	93.4	91.1	90.7	89.8	91.6	86.7	87.7	87.1	
1	BEVERAGES AND TOBACCO	100.0	95.7	92.0	84.8	79.6	78.4	74.6	76.7	70.7	69.5	69.2	
11	Beverages	100.0	96.9	94.3	90.2	86.6	85.7	83.8	83.9	79.5	78.8	78.1	
12	Tobacco and tobacco products	100.0	95.7	91.8	84.5	79.0	78.0	74.1	74.2	70.2	69.0	68.7	
2	CRUDE MATERIALS	100.0	96.4	95.1	88.7	79.8	78.0	74.5	74.9	70.7	68.8	68.1	
21	Raw hides and skins	100.0	98.1	94.2	90.0	84.8	82.9	79.2	79.5	75.6	73.0	72.1	
22	Oilseeds	100.0	98.5	91.1	82.5	75.4	73.6	69.0	69.6	65.5	63.2	62.6	
23	Crude rubber fos	100.0	95.7	92.0	86.1	81.2	80.1	77.0	76.5	71.8	70.9	70.4	
24	Wood	100.0	97.0	93.6	84.5	77.5	76.5	72.4	72.0	67.9	68.6	66.9	
25	Pulp and waste paper	100.0	95.7	92.1	84.9	79.1	77.0	74.2	74.5	70.2	68.5	68.0	
26	Textile fibers	100.0	97.5	95.5	89.4	84.6	83.3	80.8	81.6	77.9	78.6	75.8	
27	Crude minerals	100.0	96.7	93.5	87.5	82.5	81.5	78.2	78.6	74.1	73.0	72.6	
28	Metal ores and metal scrap	100.0	96.2	92.9	86.1	80.5	78.7	75.0	75.5	73.2	69.5	68.9	
3	FUELS AND RELATED PRODUCTS	100.0	96.2	95.2	86.6	81.4	80.0	76.5	76.8	72.7	71.5	70.8	
5	CHEMICALS AND RELATED PRODUCTS	100.0	96.5	93.2	87.6	83.5	82.5	79.8	80.1	76.0	76.7	74.2	
51	Organic chemicals	100.0	96.4	93.2	87.2	82.2	80.9	77.7	77.7	73.5	71.8	71.1	
54	Medicinal and pharmaceutical products (12/82=100)	120.8	114.6	107.6	100.0	92.7	91.0	86.7	87.1	81.8	80.3	79.8	
55	Essential oils, polish, & cleaning preps.	100.0	96.5	93.7	89.5	86.4	85.7	84.3	85.1	81.2	80.1	79.3	
56	Fertilizers, manufactured	100.0	97.2	96.2	92.2	89.7	90.1	88.9	90.0	86.9	86.0	86.1	
58	Artificial resins, plastics, & cellulose	100.0	96.2	93.1	88.1	84.0	83.0	80.9	81.2	76.9	75.9	75.3	
59	Chemical materials and products, n.e.s.	100.0	97.1	95.5	91.2	89.5	89.6	87.5	87.6	84.2	82.9	82.4	
6	INTERMEDIATE MANUFACTURED PRODUCTS	100.0	96.9	94.6	91.1	88.0	87.0	85.2	85.5	81.5	80.7	79.9	
61	Leather and furskins	100.0	98.1	96.7	93.0	89.6	88.6	86.9	86.5	82.1	80.8	79.7	
62	Rubber manufactures	100.0	97.1	95.2	91.9	90.7	90.1	88.8	88.7	84.5	84.2	83.5	
64	Paper and paperboard products	100.0	97.2	95.0	91.0	87.8	86.6	85.1	85.8	81.7	80.7	79.9	
66	Non-metallic mineral manufactures (1/82=100)	105.8	102.5	100.0	96.6	93.6	92.2	89.8	89.9	85.6	85.0	84.1	
67	Iron and steel	100.0	97.1	93.4	93.4	91.4	90.8	89.6	90.6	86.4	86.2	85.3	
68	Non-ferrous metals	100.0	96.1	92.9	86.7	81.8	79.9	76.6	77.1	72.6	71.4	70.7	
69	Metal manufactures, n.e.s.	100.0	97.0	95.0	92.3	89.9	89.3	88.1	88.8	84.7	84.3	83.4	
7	MACHINERY AND TRANSPORT EQUIPMENT, EX. MILITARY AND COMMERCIAL AIRCRAFT [1]	100.0	96.6	94.4	91.2	88.8	87.9	86.3	86.5	81.8	81.4	80.6	
7	MACHINERY (INCLUDING SITC 71 - 77) [1]	100.0	96.9	95.0	88.5	88.8	86.3	82.4	82.8	78.1	77.2	76.3	
71	Power generating machinery and equipment	100.0	96.4	93.8	90.0	86.7	86.2	84.8	84.2	79.8	79.2	78.4	
72	Machinery specialized for particular industries	100.0	96.7	94.1	90.5	87.5	87.1	85.9	86.5	82.2	81.3	80.6	
73	Metalworking machinery	100.0	96.5	93.7	89.7	86.7	86.0	84.1	84.4	80.0	79.1	78.4	
74	General industrial machines, parts n.e.s.	100.0	97.0	94.8	91.9	89.4	89.0	87.9	88.4	84.2	83.6	82.8	
75	Office machines and automatic data processing equipment	100.0	96.7	98.0	84.8	88.5	79.4	77.0	76.9	72.2	73.2	70.7	
76	Telecommunications, sound recording and reproducing equipment	100.0	96.7	94.3	90.1	86.9	86.5	84.5	84.7	80.8	79.8	79.0	
77	Electrical machinery and equipment	100.0	96.9	95.0	88.5	85.2	84.4	82.2	82.2	77.8	76.8	76.2	
78	Road vehicles and parts	100.0	98.5	98.2	98.9	98.6	97.8	97.4	96.9	92.5	93.2	92.0	
79	Other transport equipment, ex. military and commercial aircraft [1]	100.0	97.9	98.9	92.7	89.6	89.7	89.4	90.5	84.8	85.1	84.0	
8	MISC. MANUFACTURED ARTICLES	100.0	96.5	92.0	86.8	82.8	81.8	79.7	79.8	75.2	74.2	73.7	
82	Furniture and parts	100.0	97.7	96.1	90.1	92.5	92.2	91.5	91.4	87.8	87.6	86.9	
87	Professional, scientific and controlling instruments and apparatus	100.0	98.2	97.4	88.8	81.4	88.5	78.1	78.3	73.7	72.5	72.0	
88	Photographic apparatus and supplies, optical goods, watches and clocks	100.0	96.7	98.6	84.5	88.8	78.9	76.7	76.8	72.1	71.8	70.5	
89	Misc. manufactured articles, n.e.s.	100.0	98.8	98.6	88.2	86.7	83.7	81.9	82.8	77.3	76.5	75.8	

1 Product categories included in this SITC have been modified due to correspondence or coverage limitations.

n.e.s. Not elsewhere specified.
n.a. Not available.

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CHART A
ALL IMPORTS EXCLUDING FUELS

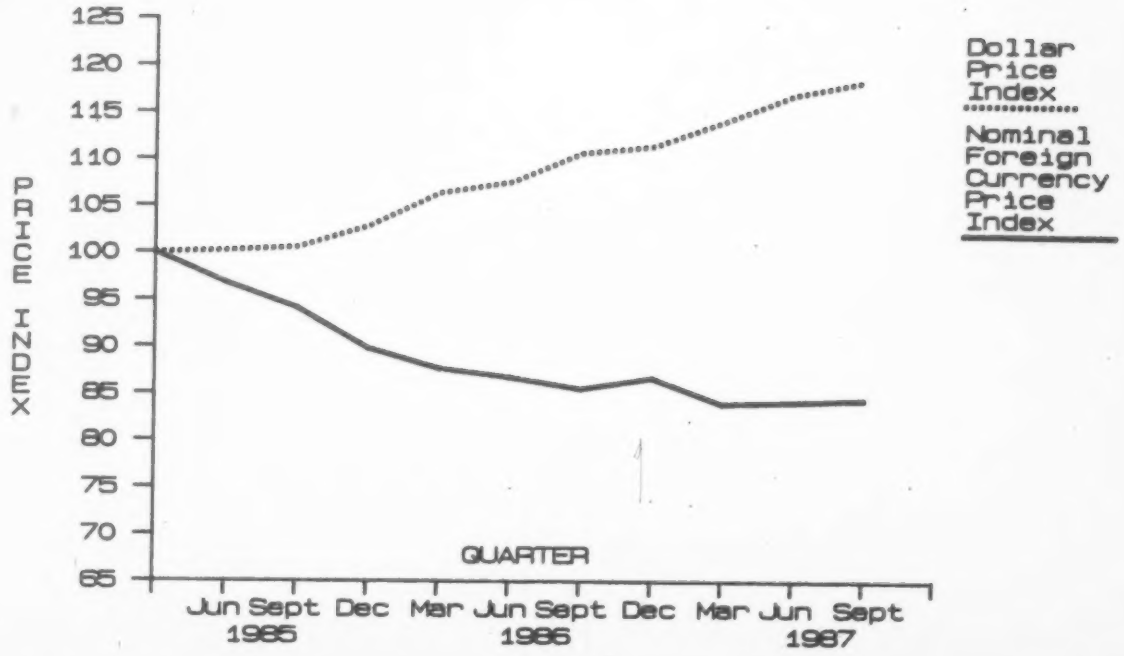


CHART B
TRADE-WEIGHTED AVERAGE EXCHANGE RATES
SELECTED IMPORTS

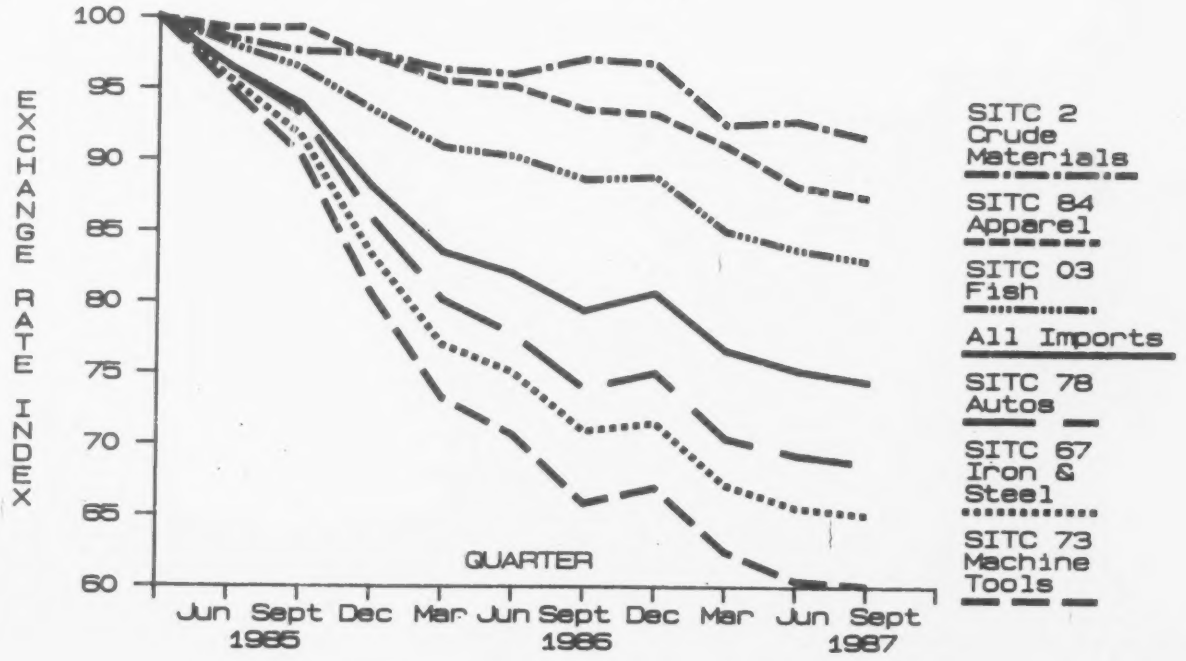


CHART C
ALL EXPORTS

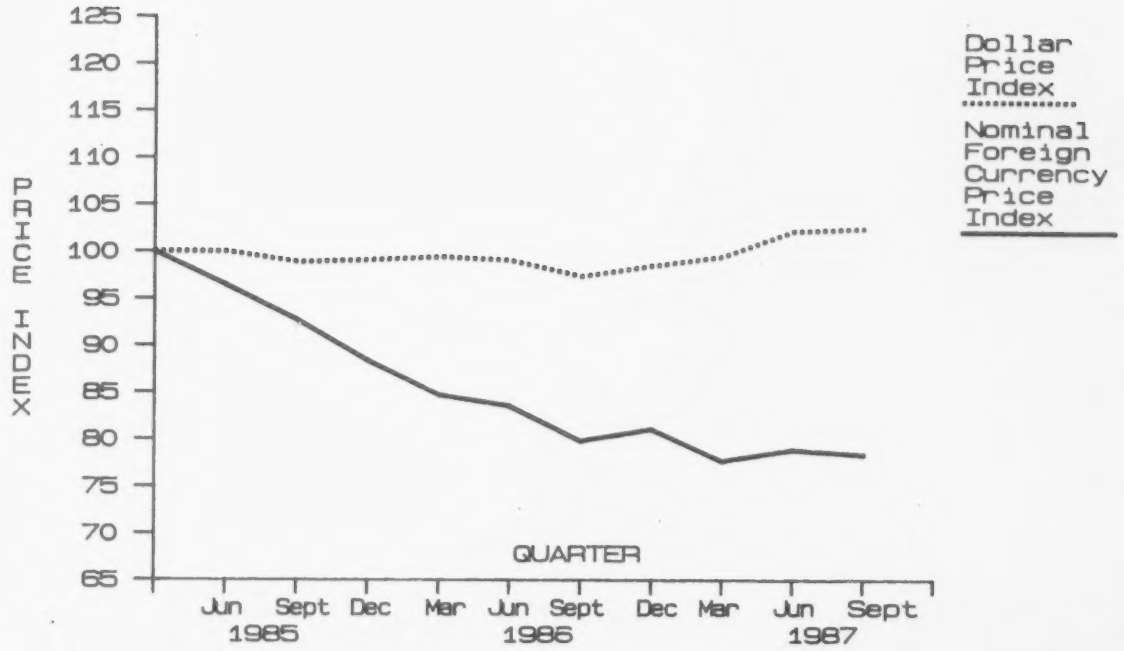
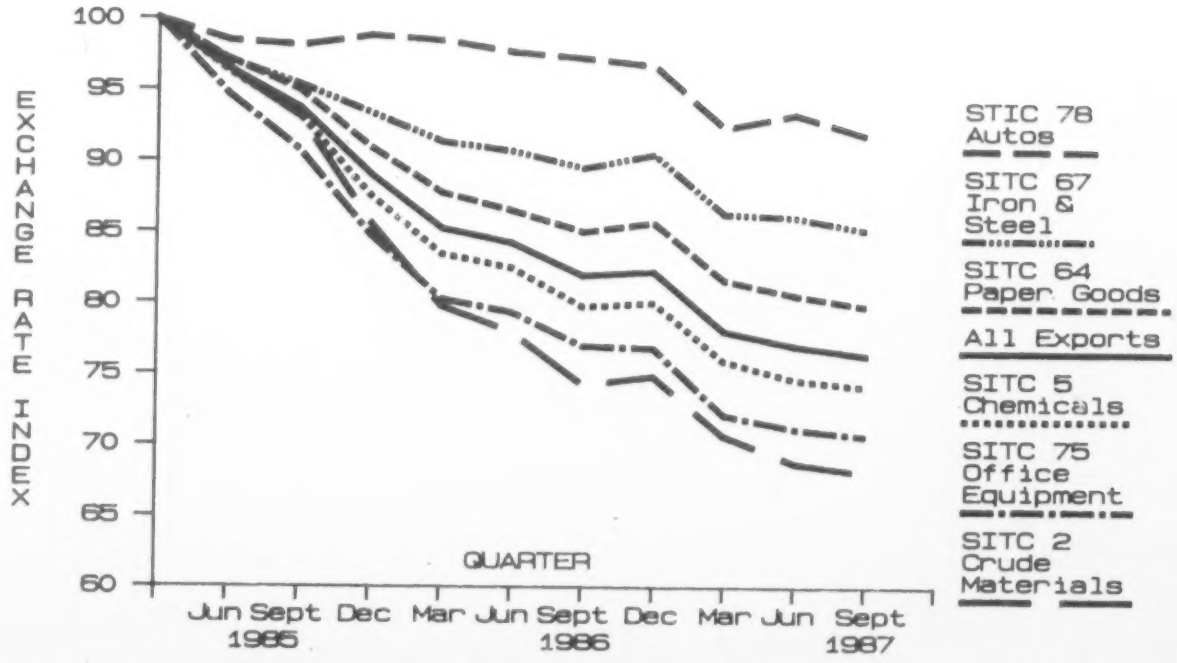


CHART D
TRADE-WEIGHTED AVERAGE EXHANGE RATES
SELECTED EXPORTS



Senator SARBANES. Senator Melcher.

Senator MELCHER. Commissioner, earlier you told me that you thought maybe you ought to do more on areas. I don't want to discourage the BLS from doing anything they want to because the more information you have the more answers I guess we can attempt to gain from that data.

But I wonder why not on energy—just do it on energy because energy is produced and the workers are involved in the industry whether it is in Louisiana or in Montana. It doesn't make any difference.

Mrs. NORWOOD. Yes, of course.

Senator MELCHER. Also, on forest products it doesn't make any difference whether the mill is in Oregon or the mill is in the Southeast, in Georgia.

Mrs. NORWOOD. We do have information, of course.

Senator MELCHER. You do have that?

Mrs. NORWOOD. Some information on prices and on employment.

Senator MELCHER. When you say prices, you mean prices of the product, of the commodity?

Mrs. NORWOOD. Yes.

Senator MELCHER. That is a correlation that——

Mrs. NORWOOD. At the producer and at the consumer level.

Senator MELCHER. The correlation I am seeking is the price of the commodity in energy or agriculture or forest products or mining and the relationship it has with both employment and naturally that would indicate, I think, an expansion of that particular industry because the price of the commodity is rising.

Do you have that sort of data?

Mrs. NORWOOD. Yes. I will be glad to look at that, and we will submit it for the record.

Senator MELCHER. I think that would be a better measuring stick for what is the underlying economy of the country and perhaps would give us a better indication of whether we are moving forward.

I know that the commodity prices in mining seem to be going up, should be reflected in a strengthening economy.

Mrs. NORWOOD. Yes.

Senator MELCHER. Thank you.

[The following information was subsequently supplied for the record:]

The tables attached show trends in employment and producer prices for metal mining (iron ore), oil and gas extraction, petroleum and coal, lumber and wood, paper, leather, and agriculture and food processing.

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Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
PRODUCTION-WORKER AVERAGE HOURLY EARNINGS—IN DOLLARS													
1978	7.67	6.90	6.92	6.94	7.61	7.63	7.69	7.82	7.80	7.95	7.98	8.06	8.06
1979	8.49	8.21	8.22	8.28	8.55	8.46	8.50	8.53	8.49	8.58	8.58	8.72	8.74
1980	9.17	8.86	8.89	8.94	9.09	9.06	9.15	9.07	9.16	9.30	9.36	9.49	9.56
1981	10.04	9.77	9.85	9.84	9.71	9.68	9.92	10.08	10.11	10.25	10.23	10.37	10.38
1982	10.77	10.63	10.59	10.59	10.60	10.62	10.78	10.86	10.87	10.98	10.95	10.99	11.01
1983	11.27	11.18	11.23	11.16	11.25	11.17	11.22	11.27	11.25	11.33	11.33	11.40	11.41
1984		11.54	11.49	11.60	11.62	11.56	11.57	11.57					
PRODUCTION-WORKER AVERAGE WEEKLY HOURS													
1947	40.8	43.7	41.7	42.0	38.3	42.6	42.8	37.0	40.0	40.2	40.8	39.7	40.8
1948	39.4	41.0	39.8	40.6	35.0	40.8	40.4	36.9	40.6	39.1	40.2	38.6	39.7
1949	36.3	40.0	38.2	37.5	38.5	39.1	34.6	33.2	32.6	33.7	40.0	36.8	32.0
1950	37.9	32.8	36.0	39.9	38.0	37.4	37.6	38.2	38.2	38.4	39.3	38.5	39.5
1951	38.4	39.4	37.2	36.5	37.2	37.6	38.1	37.9	38.3	39.1	39.7	39.2	40.1
1952	38.6	40.2	38.8	38.7	36.4	37.8	36.6	36.5	39.3	41.0	38.3	39.7	39.7
1953	38.8	38.6	37.7	37.8	37.7	39.2	40.1	39.3	40.2	39.0	39.8	38.3	38.4
1954	38.6	38.2	37.8	36.9	36.9	38.0	39.3	38.5	39.3	38.7	39.7	39.8	40.4
1955	40.7	40.5	40.4	40.1	40.1	41.0	41.3	41.2	40.9	40.7	41.0	40.1	41.3
1956	40.8	41.1	40.5	40.4	40.6	40.8	40.9	40.9	40.4	41.3	40.9	40.1	41.2
1957	40.1	40.3	40.4	40.2	40.1	39.8	40.9	40.5	40.4	40.7	40.0	38.7	39.5
1958	38.9	38.6	38.0	37.7	37.3	38.0	39.6	39.0	39.5	39.7	39.8	39.8	40.4
1959	40.5	39.7	39.8	40.1	40.2	40.7	41.5	39.7	41.0	40.5	40.9	40.4	41.4
1960	40.4	40.3	39.4	40.6	40.9	40.9	40.9	41.2	40.8	40.4	40.4	39.7	39.5
1961	40.5	40.1	39.6	38.9	39.5	40.2	41.0	41.6	41.1	40.9	41.8	41.0	40.7
1962	41.0	39.8	40.6	40.8	41.0	40.9	41.3	40.7	41.6	41.5	41.4	40.9	40.9
1963	41.6	40.9	40.9	40.5	41.2	41.9	42.6	41.2	42.0	42.2	42.4	41.4	41.7
1964	41.9	41.4	41.4	41.2	41.4	42.1	42.5	41.8	42.3	41.6	42.7	42.4	42.0
1965	42.3	41.8	41.3	41.7	41.7	42.7	42.7	42.5	43.2	42.4	42.8	41.8	42.8
1966	42.7	42.3	42.1	42.7	41.5	42.9	43.4	43.1	43.1	43.0	43.3	42.2	42.5
1967	42.6	42.3	41.6	41.8	42.3	42.4	42.8	43.3	43.1	43.0	42.9	43.0	42.4
1968	42.6	41.4	41.7	41.8	42.5	42.7	43.3	43.5	43.3	43.2	41.6	42.8	43.3
1969	43.0	42.8	42.4	42.1	43.5	43.4	42.3	42.9	43.5	43.4	43.3	43.3	43.3
1970	42.7	42.3	42.6	42.3	43.1	42.6	42.8	42.9	42.6	42.3	42.9	42.6	43.1
1971	42.4	42.4	41.9	42.1	42.3	42.3	42.6	42.5	42.3	42.1	42.8	42.2	42.9
1972	42.6	42.7	42.2	42.4	42.5	42.3	42.9	42.5	42.8	42.9	43.0	42.7	42.2
1973	42.4	41.5	41.5	41.5	41.8	42.4	43.0	42.6	42.7	42.8	42.8	42.7	43.3
1974	41.9	42.0	42.6	42.4	42.6	43.0	43.1	42.6	42.4	42.7	43.1	35.6	40.8
1975	41.9	41.6	41.6	41.1	40.6	42.4	42.2	41.7	41.6	42.2	42.9	42.7	42.6
1976	42.4	42.4	42.3	42.3	41.7	42.0	42.4	42.3	40.4	43.2	43.1	43.0	43.0
1977	43.4	41.7	42.4	42.8	43.2	43.2	43.6	44.1	43.4	44.1	44.5	44.3	42.7
1978	43.4	41.8	42.9	43.4	43.6	43.4	43.7	43.2	43.3	43.5	43.7	43.8	43.4
1979	43.0	42.4	42.6	42.9	42.6	42.7	43.2	41.7	43.1	43.5	43.7	43.7	43.9
1980	43.3	43.4	43.3	43.4	42.9	42.7	43.3	42.0	43.2	43.5	43.7	43.6	44.2
1981	43.7	43.7	42.9	42.4	43.7	43.9	42.3	43.6	44.2	43.9	44.6	44.4	44.8
1982	42.7	42.9	43.7	43.9	42.8	42.7	42.9	42.6	42.5	42.1	41.9	41.7	42.2
1983	42.5	42.5	41.4	41.8	41.7	42.2	42.5	42.1	42.6	43.1	43.2	42.9	43.4
1984		43.3	42.9	42.8	43.0	43.2	43.7	43.0					

SIC 10—METAL MINING

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
ALL EMPLOYEES—IN THOUSANDS													
1930	102.6	99.7	98.4	98.4	99.4	99.9	101.1	100.0	100.7	104.5	108.1	109.9	110.8
1940	115.2	109.5	109.4	109.2	111.4	113.9	115.6	117.6	117.9	119.4	119.6	119.5	119.3
1941	128.3	119.8	121.1	122.5	127.2	126.0	130.5	130.9	132.7	131.7	132.1	131.8	133.0
1942	132.3	133.7	133.8	135.8	135.4	135.6	134.7	134.1	132.3	129.3	127.4	127.9	127.5
1943	125.7	128.4	128.5	128.2	127.8	126.5	127.0	125.1	122.8	126.8	124.6	122.1	121.0
1944	105.7	118.7	117.6	115.2	112.9	110.2	107.8	104.0	102.1	98.5	95.4	93.6	92.6
1945	89.3	94.6	93.6	93.8	92.7	91.9	90.1	88.2	86.2	84.7	84.1	85.1	87.0
1946	87.8	87.5	77.4	76.2	73.4	78.6	85.7	90.0	95.2	96.0	96.5	97.9	98.9
1947	103.0	100.3	101.3	102.7	103.5	103.2	104.4	103.2	104.0	102.6	102.5	104.1	104.4
1948	104.2	104.9	105.1	105.5	105.9	105.1	106.6	105.1	100.9	101.9	104.9	101.7	103.0
1949	97.7	102.5	105.9	106.8	107.7	105.7	104.5	98.5	97.7	95.5	67.5	86.4	93.6
1950	96.9	94.4	96.6	94.7	94.7	96.1	97.7	99.1	98.4	98.7	97.1	97.9	99.5
1951	101.0	100.1	100.6	100.0	99.4	99.4	101.1	101.6	102.0	100.6	101.1	102.6	103.7
1952	99.8	104.5	104.8	104.7	105.4	105.7	75.3	72.4	106.3	103.6	102.9	105.8	106.7
1953	106.0	106.8	106.5	105.6	105.2	105.6	106.9	106.2	105.6	105.7	105.6	105.8	106.2
1954	99.3	105.0	103.9	102.4	99.5	100.1	101.3	102.2	100.8	91.8	92.6	96.4	95.4
1955	101.5	97.5	98.1	98.9	100.8	101.6	103.6	94.5	97.9	105.8	106.0	106.3	106.7
1956	108.8	106.9	108.2	108.8	110.8	110.2	112.4	85.4	110.8	114.6	113.3	112.3	112.2
1957	111.4	111.4	111.4	111.5	112.3	113.7	114.3	115.2	114.2	112.1	107.9	106.9	105.4
1958	93.2	101.0	97.4	95.2	91.2	91.9	93.3	91.1	88.6	90.9	90.0	94.0	93.9
1959	83.7	94.8	94.3	93.7	96.4	97.2	98.3	97.9	71.8	54.4	53.9	75.1	76.4
1960	93.8	81.4	90.2	94.7	96.9	98.1	98.6	96.3	96.6	95.5	94.3	91.4	91.8
1961	87.4	90.9	87.2	87.3	86.7	87.8	88.9	88.8	85.8	88.0	85.9	87.0	84.1
1962	82.3	84.7	84.8	84.5	85.3	86.6	87.2	85.8	81.6	78.1	77.1	76.6	75.8
1963	79.7	76.5	77.8	76.9	79.4	80.6	81.5	81.8	81.9	81.5	80.6	79.6	78.5
1964	79.5	77.6	78.2	78.6	80.7	81.9	83.0	75.3	75.3	77.5	81.5	82.3	81.9
1965	83.8	82.1	81.8	82.3	83.1	83.4	84.7	84.8	85.7	84.4	83.6	85.2	84.8
1966	86.5	84.4	84.8	84.6	85.2	86.2	88.7	88.6	89.5	88.4	86.4	85.7	85.0
1967	79.2	85.3	86.1	86.8	86.8	87.6	90.3	90.2	71.8	67.6	66.2	65.8	66.0
1968	82.0	64.8	67.0	68.7	85.0	86.3	89.1	90.5	89.1	87.4	85.5	85.5	85.0
1969	89.2	85.5	86.4	86.7	87.0	88.0	90.3	91.7	92.5	91.9	90.0	90.2	90.4
1970	93.3	90.7	91.1	91.4	92.0	92.8	96.1	96.9	96.2	95.2	92.8	92.0	92.6
1971	86.6	91.3	90.7	90.1	90.6	90.7	92.9	69.3	80.7	82.0	89.5	87.7	84.0
1972	82.7	83.6	83.0	82.6	82.2	83.0	84.1	81.6	80.6	83.2	82.5	83.0	82.7
1973	87.4	83.3	83.0	83.5	85.0	86.5	88.1	88.5	89.8	89.4	89.2	91.2	90.8
1974	95.4	92.0	92.1	91.9	93.4	95.0	97.7	96.9	94.4	97.2	97.9	98.0	98.3
1975	93.5	96.8	94.8	93.3	93.6	94.0	95.1	92.9	92.2	93.2	92.2	92.0	92.2
1976	94.1	89.7	90.0	90.4	91.1	92.7	95.2	97.5	97.1	96.9	96.4	96.3	95.3
1977	90.3	96.5	97.0	97.3	97.9	99.9	102.2	89.0	80.4	77.8	78.2	79.2	87.9
1978	93.7	90.8	91.5	92.8	92.7	92.9	94.7	94.4	95.1	94.4	94.7	95.2	95.6
1979	101.0	95.4	96.2	97.3	97.8	98.9	102.3	104.0	104.7	103.4	103.3	104.4	104.7
1980	98.2	104.4	104.3	104.7	104.3	106.2	108.1	89.6	81.3	87.1	87.7	96.6	103.5
1981	103.7	104.8	105.1	104.6	104.0	104.9	106.4	105.7	105.8	104.4	101.2	99.7	97.5
1982	72.9	93.2	90.1	89.0	85.2	76.6	74.6	68.3	63.3	60.8	57.9	57.6	57.7
1983	[illegible]	57.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1984	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
WOMEN EMPLOYEES—IN THOUSANDS													
1960	2.5	2.4	2.5	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.5
1961	2.4	2.6	2.4	2.4	2.4	2.4	2.5	2.4	2.2	2.2	2.2	2.1	2.3
1962	2.4	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.5	2.4	2.4	2.4	2.4
1963	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.1
1964	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.0	2.1	2.0
1965	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.1	2.0	2.0	2.1
1966	2.2	2.1	2.2	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2
1967	2.2	2.1	2.2	2.1	2.1	2.2	2.2	2.3	2.5	2.3	2.3	2.3	2.3

See footnotes at end of tables.

DEPARTMENT OF LABOR
Bureau of Labor Statistics

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SIC 101—IRON ORES

ALL EMPLOYEES—IN THOUSANDS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1947	34.3	30.8	31.2	32.2	33.6	34.4	35.4	35.6	35.8	35.8	35.7	36.1	35.0
1948	36.6	34.9	35.0	35.5	36.5	36.7	37.6	37.8	37.9	37.6	36.8	36.3	36.2
1949	33.7	36.2	36.3	36.3	37.6	37.6	37.9	37.5	37.1	36.6	9.4	28.8	33.1
1950	35.5	34.0	33.6	33.9	33.8	35.4	36.1	36.6	37.0	37.2	36.6	36.1	35.9
1951	37.7	36.2	36.5	36.4	36.9	37.7	38.6	38.5	39.1	38.8	38.2	37.8	37.7
1952	33.5	37.3	37.1	37.1	38.2	38.8	8.0	6.9	40.2	40.1	39.3	39.2	39.2
1953	40.1	38.9	38.4	38.5	39.2	40.3	40.9	41.2	41.3	41.1	40.7	40.5	40.5
1954	35.2	39.1	38.2	37.3	36.0	36.4	35.8	36.0	35.1	34.4	32.9	31.4	29.8
1955	34.2	30.3	30.2	30.5	32.1	34.1	35.0	36.4	36.9	37.1	36.6	36.2	35.5
1956	35.1	35.1	35.5	35.8	37.8	37.1	38.2	1.3	37.1	39.6	38.9	37.5	36.8
1957	38.4	36.3	36.2	36.2	37.9	40.2	41.0	41.5	42.5	42.1	40.8	39.7	38.3
1958	31.8	35.1	33.3	32.3	28.9	29.9	31.5	31.4	30.9	32.7	32.7	32.0	31.1
1959	27.7	31.4	31.6	32.8	34.3	35.3	35.7	35.7	11.3	10.4	10.4	31.1	32.7
1960	33.2	32.9	33.2	33.6	34.4	35.4	35.6	34.5	34.3	33.1	32.5	29.5	29.8
1961	26.9	28.3	26.7	27.1	26.5	27.1	27.3	27.4	25.7	27.3	26.8	26.9	25.6
1962	25.2	26.2	26.0	25.7	26.2	27.3	27.2	26.4	25.7	23.9	23.3	22.4	21.7
1963	24.1	20.7	22.0	22.1	23.1	25.0	25.2	26.0	26.0	25.6	25.1	24.4	23.5
1964	24.6	22.8	23.1	23.0	24.4	25.2	25.5	25.6	25.3	25.7	25.5	24.9	24.2
1965	25.9	24.6	24.6	25.1	25.6	26.4	26.7	26.5	26.6	26.6	26.4	26.3	25.6
1966	26.0	25.0	25.0	24.7	25.4	26.6	27.3	26.7	27.2	27.3	26.6	25.4	24.7
1967	25.6	24.7	25.1	25.3	25.2	25.9	26.7	26.4	26.3	26.0	25.5	25.0	24.6
1968	25.3	24.4	24.7	25.1	25.6	26.0	26.7	27.2	25.7	25.6	24.4	24.3	23.7
1969	25.5	23.8	24.6	24.8	24.9	25.8	26.7	26.6	26.8	26.3	25.4	25.1	24.9
1970	26.0	24.7	25.0	24.9	25.4	26.1	27.2	27.4	27.5	27.3	25.9	24.9	25.4
1971	25.2	24.7	24.5	24.8	25.3	25.7	26.7	26.9	26.6	25.8	25.4	24.7	21.4
1972	22.0	21.6	21.6	21.7	21.8	22.5	23.1	21.1	20.9	23.0	22.6	22.5	21.8
1973	23.6	21.9	21.8	22.1	23.6	24.4	24.6	24.8	24.7	24.4	24.0	23.7	23.5
1974	23.8	23.2	23.0	22.5	23.5	24.1	24.5	24.4	24.5	23.9	24.2	23.9	24.0
1975	23.5	23.4	23.6	23.5	23.9	24.2	24.5	23.6	23.2	23.9	23.1	22.8	22.5
1976	24.5	22.5	22.8	23.2	24.1	24.9	25.5	25.8	25.8	25.5	25.1	24.6	24.3
1977	19.3	24.4	24.9	25.0	24.8	25.3	26.0	25.1	10.1	9.6	9.5	9.1	18.0
1978	24.2	21.9	22.2	23.4	23.6	24.3	24.8	24.7	25.2	25.1	25.1	24.9	24.6
1979	24.8	24.3	24.1	24.2	24.2	24.5	25.0	25.4	25.6	25.3	25.0	25.0	24.8
1980	21.6	24.2	23.9	24.0	22.9	23.2	23.0	21.0	19.6	19.3	19.0	18.4	20.1
1981	21.1	21.1	21.3	21.4	21.6	22.0	22.6	22.3	22.0	21.8	19.8	19.1	17.6
1982	13.2	18.9	18.2	18.1	16.5	15.3	15.3	13.0	9.1	8.1	8.5	8.0	9.5
1983	[illegible]												
1984													

PRODUCTION WORKERS—IN THOUSANDS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1939	20.8	18.7	18.9	19.1	19.8	20.6	21.5	21.6	21.9	22.4	22.7	21.4	21.4
1940	23.5	21.0	20.8	20.8	21.8	23.4	24.5	25.1	25.4	25.5	25.2	24.6	23.6
1941	27.9	23.8	24.5	25.0	27.6	28.4	28.9	28.3	29.6	29.6	29.8	29.7	29.4
1942	33.3	29.3	29.7	30.8	32.6	33.4	34.2	34.8	35.3	35.6	35.2	34.4	34.0
1943	34.9	33.9	34.1	34.4	35.6	36.0	36.5	36.4	35.7	35.3	34.8	33.3	33.0
1944	31.2	32.2	32.3	32.2	32.3	32.8	32.3	31.7	31.5	31.0	29.7	28.6	27.3
1945	26.2	26.8	26.5	26.8	27.1	27.1	26.5	26.2	25.9	25.4	25.3	25.4	25.4
1946	25.6	24.6	19.3	17.1	17.7	21.7	28.6	29.4	30.2	29.9	30.1	29.6	28.8
1947	31.3	28.2	28.4	29.3	30.7	31.4	32.4	32.6	32.8	32.6	32.6	32.9	31.7
1948	33.2	31.7	31.6	32.2	33.1	33.4	34.2	34.3	34.4	34.2	33.4	32.9	32.0
1949	30.0	32.5	32.5	32.6	33.9	33.7	34.0	33.6	33.2	32.8	6.1	25.1	30.3
1950	31.6	30.1	29.8	30.2	30.8	31.5	32.1	32.6	33.1	33.1	32.5	32.3	32.1

See footnotes at end of tables.

SIC 101—IRON ORES (Con.)

PRODUCTION WORKERS—IN THOUSANDS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1951	33.5	32.3	32.4	32.3	32.8	33.6	34.4	34.1	34.6	34.5	33.8	33.6	33.4
1952	29.0	33.0	32.8	32.6	33.8	34.3	3.9	2.9	35.5	35.4	34.7	34.5	34.5
1953	35.0	34.0	33.6	33.6	34.1	35.1	35.7	35.9	36.0	35.9	35.4	35.3	35.3
1954	30.2	33.9	33.0	32.1	31.0	31.5	30.7	31.0	30.1	29.4	28.1	26.7	25.0
1955	29.4	25.5	25.7	25.9	27.3	29.3	29.9	31.5	31.9	32.1	31.6	31.3	30.6
1956	30.1	30.2	30.3	30.7	32.8	32.4	33.0	6.3	32.1	34.5	33.8	32.7	32.1
1957	34.0	31.5	31.3	31.3	32.7	35.2	35.6	35.9	36.6	36.2	35.2	34.1	32.8
1958	26.8	29.7	28.1	27.1	23.8	25.0	26.4	26.2	25.8	27.9	27.8	27.1	26.3
1959	23.0	26.6	26.7	28.0	29.4	30.3	30.6	30.5	6.9	5.8	5.9	27.2	28.7
1960	28.6	28.9	29.1	29.3	29.9	30.9	30.9	29.7	29.6	28.2	27.6	24.4	24.9
1961	22.3	23.4	21.9	22.3	21.8	22.5	22.7	22.8	21.1	22.8	22.3	22.4	21.1
1962	21.0	21.7	21.6	21.3	21.9	23.0	22.9	22.2	21.6	19.9	19.4	18.6	17.8
1963	20.4	17.0	18.3	18.4	19.4	21.3	21.6	22.4	22.3	21.9	21.5	20.8	19.8
1964	21.0	19.3	19.5	19.5	20.9	21.7	21.9	22.0	21.5	21.9	21.7	21.2	20.5
1965	22.0	20.9	20.9	21.4	21.9	22.6	22.7	22.6	22.5	22.4	22.4	22.2	21.5
1966	21.8	20.9	20.9	20.7	21.3	22.4	23.1	22.4	22.9	23.0	22.4	21.3	20.7
1967	21.3	20.6	21.0	21.0	21.0	21.6	22.4	22.0	22.0	21.7	21.2	20.6	20.3
1968	20.8	20.1	20.4	20.6	21.1	21.5	22.2	22.6	21.1	21.0	19.9	19.8	19.1
1969	20.7	19.0	19.8	20.0	20.1	21.1	21.9	21.8	21.9	21.6	20.8	20.5	20.3
1970	21.1	20.1	20.3	20.2	20.7	21.3	22.3	22.3	22.6	22.2	20.9	20.1	20.7
1971	20.4	20.0	19.8	20.1	20.6	20.9	21.7	22.0	21.6	20.8	20.7	19.9	16.9
1972	17.7	17.2	17.2	17.4	17.5	18.4	18.7	16.9	16.5	18.6	18.2	18.7	17.5
1973	19.2	17.6	17.5	17.8	19.0	19.8	20.0	20.1	20.1	19.9	19.6	19.3	19.1
1974	19.5	18.8	18.7	18.2	19.1	19.6	20.1	29.0	20.1	19.6	19.9	19.6	19.7
1975	19.0	19.0	19.1	19.1	19.4	19.7	19.8	18.2	18.5	19.2	18.6	18.2	18.0
1976	19.8	17.9	18.2	18.7	19.4	20.2	20.7	20.8	20.9	20.7	20.3	19.5	19.5
1977	14.6	19.6	20.0	20.1	19.7	20.3	20.8	20.0	5.8	5.4	5.3	5.0	13.3
1978	19.6	17.4	17.8	19.1	19.3	19.7	20.2	19.9	20.5	20.5	20.5	20.3	19.9
1979	19.9	19.7	19.3	19.4	19.3	19.7	20.1	20.4	20.3	20.3	20.0	20.1	19.8
1980	16.7	19.3	19.0	19.1	17.8	18.1	17.9	15.7	14.8	14.7	14.3	14.0	15.3
1981	16.4	16.5	16.6	16.8	17.1	17.2	17.9	17.2	17.0	16.9	15.3	14.7	13.6
1982	9.3	14.5	14.0	13.4	12.2	11.6	11.1	8.9	5.4	5.0	5.1	5.1	5.8
1983	6.9	7.1	7.4	7.2	7.0	7.2	7.5	7.3	6.7	5.3	7.0	6.6	6.7
1984		7.9	7.9	8.3	8.7	9.1	9.3	9.4					

PRODUCTION-WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1939	26.09	24.73	25.40	25.37	23.45	25.28	26.02	23.63	26.20	25.83	29.75	28.30	27.97
1940	28.50	27.90	28.08	27.45	26.68	28.31	27.60	28.54	29.10	29.06	30.52	28.46	29.89
1941	33.81	28.91	29.29	29.44	33.99	35.76	36.50	34.09	35.79	34.73	36.03	34.75	34.41
1942	36.74	34.18	35.50	35.42	36.09	37.92	37.93	36.29	37.68	36.04	37.78	37.85	37.43
1943	39.95	36.53	37.45	37.14	38.80	40.68	41.58	40.41	43.17	41.85	43.18	38.81	39.06
1944	41.28	39.74	40.44	41.05	41.73	41.82	42.06	40.42	42.33	41.87	42.92	40.69	40.19
1945	44.01	39.99	44.91	46.42	45.76	45.77	46.41	43.66	43.95	43.78	45.35	42.44	39.55
1946	43.42	39.12	20.71	16.70	42.33	37.49	46.93	47.64	47.48	47.95	47.56	45.83	47.40
1947	51.75	46.02	48.16	48.00	47.40	51.04	55.95	52.63	54.00	53.53	54.36	54.25	53.49
1948	57.69	54.76	56.18	55.58	54.03	57.46	56.99	54.97	58.50	59.87	62.04	60.45	60.63
1949	58.23	62.05	62.11	62.60	61.50	60.95	59.62	56.33	56.69	58.46	53.79	38.36	58.21
1950	61.27	58.04	58.97	56.94	58.97	58.65	60.05	60.82	60.28	62.10	65.66	63.07	69.76
1951	71.57	69.31	70.05	68.47	72.33	74.36	64.22	66.52	74.80	75.52	75.75	72.16	75.69
1952	79.17	73.42	75.24	77.50	71.40	76.80	49.52	69.53	79.92	84.74	85.19	86.90	81.77
1953	89.67	81.20	82.40	83.01	83.82	87.49	89.40	94.73	97.65	97.41	91.96	92.35	91.54
1954	81.00	89.38	84.99	82.01	75.75	76.80	80.30	82.78	81.92	79.78	79.28	77.92	80.89
1955	91.37	85.14	82.94	82.56	79.57	86.98	87.56	93.13	96.76	98.95	100.80	99.42	98.23

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ALL EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	952	985	954	945	935	935	946	953	953	949	955	956	957
1984	986	954	940	952	953	964	981	984	988	982	967	964	950
1985	927	941	933	933	938	940	942	935	929	919	910	904	884
1986	793	883	850	832	804	781	772	770	753	740	737	736	728
1987		716	713										

WORKER EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	117	121	120	119	118	116	116	117	117	115	115	115	115
1984	118	114	114	115	115	116	118	120	120	119	119	120	120
1985	120	121	120	121	121	121	121	121	120	119	119	118	117
1986	107	117	116	115	111	108	107	105	103	100	99	99	98
1987		97	97										

PRODUCTION WORKERS—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	673	700	672	665	656	658	668	675	673	672	678	680	679
1984	686	678	672	675	676	685	699	699	703	700	688	687	672
1985	658	666	658	659	666	668	671	664	661	655	647	644	636
1986	566	626	607	584	561	542	536	536	528	521	519	520	514
1987		501	502										

PRODUCTION-WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	479.40	475.15	464.92	466.49	488.13	471.37	477.28	474.80	488.10	488.78	488.19	498.35	497.64
1984	503.50	500.98	494.64	498.19	501.38	501.55	507.07	500.08	505.91	515.68	508.04	505.31	514.41
1985	519.93	508.79	514.08	519.28	517.76	516.78	524.84	508.75	518.73	526.15	517.97	520.56	535.33
1986	534.87	542.57	521.52	521.56	521.64	519.16	523.33	517.09	529.17	527.08	526.25	528.40	535.51
1987		538.05	527.52										

PRODUCTION-WORKER AVERAGE HOURLY EARNINGS—IN DOLLARS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	11.28	11.18	11.23	11.16	11.25	11.17	11.23	11.28	11.27	11.35	11.35	11.43	11.44
1984	11.63	11.57	11.53	11.64	11.66	11.61	11.63	11.63	11.63	11.72	11.58	11.63	11.73
1985	11.98	11.86	11.98	11.91	11.93	11.88	12.01	11.91	11.98	12.04	11.99	12.05	12.25
1986	12.44	12.22	12.38	12.33	12.42	12.42	12.48	12.49	12.51	12.52	12.50	12.57	12.63
1987		12.65	12.56										

PRODUCTION-WORKER AVERAGE WEEKLY HOURS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	42.5	42.5	41.4	41.8	41.7	42.2	42.5	42.1	42.6	43.1	43.1	42.9	43.5
1984	43.3	43.3	42.9	42.8	43.0	43.2	43.6	43.0	43.5	44.0	43.2	43.5	44.3
1985	43.4	42.9	43.2	43.6	43.4	43.5	43.7	42.8	43.3	43.7	43.2	43.2	43.7
1986	42.2	44.4	42.4	42.3	42.8	41.8	41.9	41.4	42.3	42.1	42.1	41.4	42.4
1987		42.5	42.8										

SIC 10—METAL MINING

ALL EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	56.4	58.4	57.2	56.7	56.5	57.2	57.3	56.2	55.2	54.2	54.6	55.7	55.6
1984	55.1	57.1	56.7	56.9	56.9	57.4	57.7	56.6	54.2	53.3	52.6	52.6	49.4
1985	48.4	48.2	48.3	48.9	48.3	47.8	47.7	46.1	45.7	44.5	44.1	44.4	43.0
1986	41.1	43.7	43.0	42.7	42.5	42.0	41.6	41.6	38.8	38.9	39.0	39.3	40.5
1987		40.6	41.9										

See footnotes at end of tables.

SIC 10—METAL MINING (Con.)

WORKER EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	4.9	5.0	5.0	4.9	4.9	4.9	5.2	5.0	5.1	4.8	4.9	4.8	4.7
1984	4.7	4.6	4.7	4.7	4.6	4.6	4.9	5.2	4.9	4.8	4.6	4.6	4.5
1985	4.0	4.3	4.3	4.2	4.1	4.2	4.1	4.0	3.7	3.7	3.7	3.7	3.6
1986	3.3	3.6	3.4	3.5	3.3	3.4	3.4	3.4	3.2	3.2	3.2	3.1	3.2
1987		3.2	3.2										

PRODUCTION WORKERS—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	41.0	42.0	41.1	41.1	41.0	41.7	42.1	41.1	40.1	39.8	41.0	40.5	40.4
1984	40.1	41.6	41.2	41.5	41.7	42.3	42.6	41.6	39.0	38.3	37.6	37.6	35.8
1985	34.1	35.1	35.3	36.1	35.7	35.4	35.4	33.6	33.7	32.8	32.6	32.5	31.3
1986	30.5	32.2	32.1	31.5	31.6	31.2	30.9	30.9	28.6	28.8	29.0	29.1	30.2
1987		30.1	31.5										

PRODUCTION-WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	494.30	496.12	480.27	484.45	487.89	488.05	496.58	479.68	489.05	493.44	497.06	506.86	520.15
1984	528.53	512.27	517.05	520.76	522.78	530.81	536.10	522.80	526.00	545.49	540.09	541.82	547.45
1985	547.24	538.25	543.05	542.23	551.97	544.16	546.89	551.04	550.13	545.66	547.69	550.39	568.52
1986	542.52	545.79	554.55	568.20	554.96	548.06	554.85	538.87	538.06	543.77	528.14	522.75	523.24
1987		538.60	544.28										

PRODUCTION-WORKER AVERAGE HOURLY EARNINGS—IN DOLLARS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	12.58	12.56	12.61	12.39	12.51	12.44	12.55	12.58	12.54	12.62	12.68	12.64	12.78
1984	13.05	12.68	12.83	12.89	12.84	13.01	12.99	13.07	13.15	13.24	13.27	13.28	13.32
1985	13.30	13.29	13.31	13.29	13.43	13.24	13.21	13.44	13.55	13.44	13.48	13.49	13.45
1986	13.20	13.41	13.46	13.41	13.47	13.40	13.50	13.33	12.96	13.04	12.85	12.75	12.78
1987		12.94	12.90										

PRODUCTION-WORKER AVERAGE WEEKLY HOURS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	39.3	39.5	38.8	39.1	39.0	39.3	39.6	38.1	38.0	38.1	38.2	40.1	40.7
1984	40.5	40.4	40.3	40.4	40.4	40.8	40.5	40.0	40.0	41.2	40.7	40.8	41.1
1985	40.9	40.5	40.8	40.8	41.1	41.1	41.4	41.0	40.6	40.6	40.6	40.8	41.6
1986	41.1	40.7	41.2	41.7	41.2	40.9	41.1	40.5	40.9	41.7	41.1	41.0	41.2
1987		41.2	41.9										

SIC 101—IRON ORES

ALL EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	10.3	10.7	11.1	10.9	10.6	11.0	11.1	10.9	9.7	7.7	10.4	9.6	9.8
1984	11.4	11.3	11.1	11.5	12.0	12.5	12.7	12.9	11.2	11.1	10.9	10.6	8.4
1985	9.6	8.1	9.4	10.7	10.8	10.9	10.8	9.3	10.3	9.1	9.0	9.3	7.7
1986	8.0	8.4	8.4	8.3	9.2	9.2	9.1	9.2	6.9	6.7	6.6	6.7	7.4
1987		7.7	8.9										

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Produce Price Index

WPI 1011 Iron ore

BASE 1967 = 100

YR	ANN AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1947	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
1948	61.0	56.0	56.0	57.2	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5
1949	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
1950	77.8	73.5	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	83.5
1951	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5
1952	86.9	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5
1953	97.1	91.1	91.1	91.1	98.0	98.0	98.0	99.6	99.6	99.6	99.6	99.6	99.6
1954	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
1955	101.3	99.7	99.7	101.7	101.7	101.7	101.7	101.7	101.7	101.7	101.7	101.7	101.7
1956	109.2	110.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1
1957	114.7	109.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1	115.1
1958	111.8	115.1	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	109.1	109.1
1959	107.2	109.1	109.1	109.1	109.1	106.3	106.3	106.3	106.3	106.3	106.3	106.3	106.3
1960	108.0	106.3	106.3	106.3	106.3	106.3	109.1	109.1	109.1	109.1	109.1	109.1	109.1
1961	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1
1962	104.4	109.1	107.2	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7
1963	103.6	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.7	103.0	103.0	103.7	103.7
1964	100.8	101.3	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7
1965	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7
1966	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7
1967	100.0	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7
1968	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
1969	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
1970	100.1	98.1	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3	100.3
1971	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0
1972	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0
1973	106.7	106.0	106.0	106.0	106.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.3
1974	123.3	107.3	107.3	107.3	107.3	123.3	123.3	123.3	127.8	130.3	130.3	130.3	130.3
1975	154.3	144.3	150.3	150.3	150.3	150.6	150.6	150.2	159.2	159.2	159.2	159.2	159.2
1976	171.0	159.2	159.2	169.0	169.8	169.8	169.8	169.8	169.8	176.8	176.8	176.8	176.8
1977	186.1	182.6	182.6	184.3	184.8	184.8	184.8	184.8	184.8	184.8	184.8	184.8	184.8
1978	194.9	186.8	186.8	186.8	191.4	191.7	194.3	196.7	196.7	204.6	204.6	204.6	204.2
1979	216.7	204.2	204.2	204.2	211.8	211.8	219.1	219.1	223.2	226.3	226.3	226.3	227.4
1980	244.8	227.6	236.8	246.1	246.1	246.1	246.1	246.2	248.2	248.2	248.2	248.2	248.2
1981	269.4	248.2	269.8	269.8	269.8	269.8	269.8	269.8	269.8	269.8	269.8	269.8	272.0
1982	278.7	272.0	272.0	272.0	272.0	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1
1983	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1
1984	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1
1985	271.7	281.4	281.4	281.4	281.4	281.3	281.3	281.3	238.6	238.6	238.0	235.0	243.5
1986	255.1	263.5	263.5	263.5	263.5	243.5	243.5	243.1	243.5	243.5	243.4	243.8	243.3
1987	NA	239.3	239.3	239.3	234.8	235.1	235.5	235.0	235.0	231.1	226.5	NA	NA

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SIC 13—OIL AND GAS EXTRACTION

ALL EMPLOYEES—IN THOUSANDS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1938	197.6	193.9	190.0	194.6	194.5	198.6	200.3	201.9	197.3	197.7	198.7	200.7	200.7
1940	202.7	204.5	201.1	205.0	207.5	208.7	206.7	205.1	203.4	199.4	198.7	195.2	194.6
1941	210.6	197.0	193.5	198.4	204.8	211.2	217.2	220.9	221.8	218.9	215.0	212.8	214.8
1942	195.8	214.4	204.6	198.3	196.4	195.1	195.8	197.0	196.1	191.7	188.4	186.9	185.2
1943	188.0	182.0	183.2	184.6	185.3	185.0	189.1	190.5	193.2	192.5	192.7	194.3	195.1
1944	207.1	196.3	197.0	198.7	201.5	205.3	209.5	212.8	214.7	213.6	212.3	212.0	211.2
1945	215.2	211.5	211.1	211.1	211.2	211.3	213.9	215.1	216.8	215.6	217.7	221.3	226.3
1946	230.6	228.0	227.6	225.6	226.1	228.4	233.0	234.0	234.5	232.3	232.7	232.0	231.6
1947	248.5	235.9	235.0	236.2	238.7	243.6	250.3	256.1	257.9	256.5	256.8	256.8	257.9
1948	274.0	257.7	257.1	260.9	267.4	273.0	280.2	284.9	287.7	285.5	278.0	277.7	277.7
1949	266.3	267.0	266.6	266.1	267.0	266.9	269.4	270.3	270.6	266.9	261.6	261.6	261.3
1950	266.1	255.3	253.1	254.0	259.3	261.2	268.6	273.6	276.3	276.6	272.2	270.5	270.7
1951	284.4	264.4	265.4	268.7	273.6	278.1	287.3	292.8	297.2	295.1	294.1	296.0	297.3
1952	303.4	296.9	295.4	297.4	301.3	302.8	310.2	311.2	309.1	305.3	302.8	302.7	305.5
1953	311.4	305.4	302.1	302.8	305.5	307.7	316.1	318.9	321.0	317.1	312.0	313.9	313.7
1954	318.1	310.9	310.3	311.5	315.4	317.2	325.6	328.5	329.9	319.8	315.7	317.8	318.4
1955	331.9	316.6	316.1	320.2	324.2	328.2	337.9	342.3	343.9	340.8	335.3	337.9	338.9
1956	340.1	332.6	331.0	336.3	336.8	336.1	340.7	352.2	350.3	344.2	337.1	337.7	336.9
1957	344.0	335.6	336.4	334.9	335.7	335.8	350.2	357.2	356.7	352.5	343.9	343.8	343.8
1958	327.5	330.1	331.0	323.1	319.7	320.1	326.7	328.1	330.8	328.9	324.0	325.0	331.6
1959	339.5	328.3	318.5	321.2	326.6	331.4	338.8	342.6	337.7	333.0	324.0	326.4	324.2
1960	308.2	313.2	308.0	304.4	308.1	308.6	313.9	312.9	313.0	310.8	306.3	306.0	304.5
1961	303.1	308.1	298.2	298.1	300.0	303.9	308.4	312.2	308.8	305.0	300.1	301.2	301.1
1962	298.0	298.6	297.7	296.8	296.7	298.2	301.7	303.5	301.9	299.6	295.3	291.8	292.7
1963	288.2	285.9	284.5	284.8	285.7	290.8	295.8	297.5	293.4	290.3	284.8	286.6	288.9
1964	291.1	285.6	282.1	282.8	285.0	286.3	290.5	301.3	301.0	295.3	291.0	292.8	291.1
1965	287.1	286.7	284.6	284.6	284.1	287.2	293.6	295.3	292.5	285.7	282.4	283.2	284.9
1966	281.8	281.6	278.9	279.0	278.8	279.4	286.7	288.8	289.6	281.2	278.1	279.5	280.4
1967	275.8	276.7	272.1	271.6	274.6	277.3	279.1	282.9	283.8	276.2	271.9	273.0	275.0
1968	275.6	272.3	267.9	267.9	269.5	276.8	279.0	282.4	285.0	280.2	275.7	277.2	279.3
1969	279.0	277.7	274.4	272.6	275.3	278.4	285.1	288.3	287.7	283.5	278.7	277.7	281.0
1970	278.1	276.7	272.0	268.6	268.8	268.8	275.9	274.4	273.7	268.0	264.0	265.0	268.0
1971	264.2	262.2	257.9	256.1	258.3	260.5	268.1	268.5	271.2	266.6	260.1	266.5	268.8
1972	267.9	266.7	263.5	264.4	262.4	263.8	271.3	272.1	274.7	271.4	268.5	268.2	267.4
1973	273.9	265.0	268.2	266.2	265.6	268.8	278.4	281.1	281.8	276.0	275.8	277.7	281.0
1974	280.2	282.5	283.4	285.7	287.5	292.3	301.6	306.9	311.5	306.5	311.1	313.4	318.4
1975	326.8	319.6	320.0	319.7	319.8	325.0	331.8	335.9	338.6	330.6	333.2	334.7	338.0
1976	345.7	338.4	334.6	335.6	336.4	338.7	347.8	352.2	356.5	350.2	351.0	352.5	354.5
1977	361.4	356.9	358.8	361.3	360.1	373.3	388.2	391.6	394.7	383.5	394.5	397.9	408.5
1978	429.3	424.1	408.5	413.2	414.8	430.7	436.3	441.1	443.4	440.7	442.0	443.6	445.2
1979	474.2	448.1	452.4	453.6	452.3	461.6	477.0	483.6	488.5	487.5	482.0	483.7	488.8
1980	560.7	564.0	511.3	517.1	526.2	545.4	567.2	576.0	584.5	584.2	581.9	580.5	600.0
1981	602.1	622.7	630.2	630.7	654.1	671.1	698.3	712.8	727.4	727.8	730.4	740.9	748.8
1982	748.3	753.7	754.5	754.0	741.6	729.6	727.1	708.8	699.9	674.7	655.8	650.4	648.1
1983	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1984	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

WOMEN EMPLOYEES—IN THOUSANDS

1980	25.2	25.4	25.4	25.4	25.7	25.5	25.5	25.4	25.3	24.9	24.7	24.6	24.7
1981	24.6	24.7	24.7	24.5	24.6	24.6	24.7	24.7	24.8	24.5	24.3	24.3	24.7
1982	25.1	24.9	24.7	25.0	25.1	25.0	25.3	25.4	25.5	25.2	25.1	25.4	25.1
1983	25.1	25.2	25.2	25.3	25.2	25.1	25.2	25.5	25.2	24.8	25.0	24.9	24.8
1984	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible] as end of table.

SIC 13—OIL AND GAS EXTRACTION (Con.)

WOMEN EMPLOYEES—IN THOUSANDS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1964	24.8	24.7	24.8	24.5	24.6	24.8	25.3	25.2	25.0	24.7	24.8	24.7	24.6
1965	24.4	24.8	24.7	24.5	24.4	24.5	24.5	24.4	24.4	24.4	24.1	24.3	24.3
1966	24.5	24.3	24.1	24.1	24.0	24.2	24.4	24.7	24.7	24.7	24.9	24.9	25.3
1967	25.5	25.3	25.3	25.3	25.5	25.5	25.5	25.8	26.0	25.6	25.5	25.5	25.5
1968	25.9	25.7	25.5	25.5	25.3	25.6	25.7	26.1	26.3	26.0	26.1	26.2	26.2
1969	26.8	26.5	26.4	26.3	26.6	26.6	26.6	26.8	27.0	26.8	27.1	27.2	27.2
1970	27.6	27.4	27.3	27.0	27.3	27.5	27.7	28.0	27.7	27.6	27.6	27.7	27.9
1971	28.3	27.9	27.8	28.0	28.1	28.2	28.4	28.7	28.4	28.3	28.6	28.6	28.6
1972	29.5	28.6	28.8	29.0	29.2	29.1	29.4	30.1	29.8	29.6	29.8	30.2	30.3
1973	31.1	30.2	30.5	30.6	30.7	30.8	31.1	31.1	31.4	31.2	31.3	31.9	32.3
1974	34.7	32.3	32.9	32.9	33.5	34.3	34.6	35.6	35.6	35.7	36.0	36.7	36.0
1975	39.4	37.8	37.6	38.1	38.6	38.9	39.4	40.1	40.2	40.0	40.3	40.7	40.0
1976	42.5	41.9	41.8	42.2	41.6	42.1	43.0	43.2	43.6	42.7	42.3	42.3	42.7
1977	45.5	42.8	42.8	43.0	43.1	43.9	45.6	46.5	47.2	47.0	47.3	48.3	48.6
1978	53.9	49.6	50.2	50.4	51.2	51.9	54.1	55.3	56.0	56.2	56.6	57.2	57.7
1979	63.9	58.1	59.0	60.6	61.5	62.5	64.9	66.4	67.4	69.6	68.0	67.2	67.5
1980	76.1	67.4	69.1	70.5	71.7	73.2	76.1	78.5	80.0	80.2	80.8	82.3	83.6
1981	98.7	85.3	88.2	90.4	92.7	95.9	98.9	102.7	104.6	104.4	105.4	107.2	108.5
1982	107.0	106.3	108.3	110.4	111.3	110.3	111.0	111.0	108.9	107.5	104.6	102.0	100.6
1983	93.0	97.4	96.2	95.8	94.7	93.1	93.0	93.5	93.0	92.1	91.6	91.6	92.3
1984		91.2	91.8	92.4	92.9	93.0	93.5	94.0					

PRODUCTION WORKERS—IN THOUSANDS

1947	200.3	197.5	196.7	197.6	200.0	205.0	211.0	216.2	217.8	216.9	217.3	217.4	218.4
1948	232.0	219.9	217.9	226.2	227.9	228.0	238.8	242.6	244.2	240.8	234.6	235.4	233.9
1949	223.0	225.6	223.2	222.2	222.5	223.3	226.5	228.1	226.5	222.4	218.0	219.0	220.0
1950	226.5	214.2	212.9	215.3	219.6	222.2	230.8	233.0	237.4	236.9	232.8	231.0	231.1
1951	243.3	225.0	225.2	229.2	233.6	238.4	247.3	251.8	256.8	253.0	251.7	253.0	253.7
1952	256.3	253.0	252.0	253.5	256.7	256.7	263.6	263.1	260.7	253.8	252.5	253.5	256.2
1953	260.9	255.1	252.2	252.4	256.0	257.5	266.4	268.3	271.4	268.0	261.9	263.3	263.5
1954	263.2	257.2	257.0	258.3	261.4	263.3	271.9	273.8	271.3	263.1	259.0	261.6	260.0
1955	268.9	256.2	257.6	259.9	262.3	265.1	275.0	277.8	278.9	274.6	269.4	271.4	275.1
1956	271.4	269.4	266.7	268.2	271.1	268.7	268.4	281.8	278.8	278.0	268.1	268.5	265.9
1957	265.5	263.0	263.3	261.3	260.3	258.0	272.3	276.0	277.1	270.4	261.6	261.3	259.6
1958	242.9	254.3	248.4	238.7	235.1	236.9	242.1	243.7	245.0	244.5	240.3	241.3	240.0
1959	244.2	243.3	233.8	236.0	240.4	245.6	253.0	256.7	251.4	247.2	242.2	242.7	240.1
1960	225.6	230.5	225.5	222.6	224.1	225.4	229.4	227.6	228.2	226.3	223.0	222.7	221.0
1961	218.8	217.3	215.2	214.6	216.1	219.7	224.4	226.4	224.0	220.1	215.0	216.4	215.9
1962	212.8	214.7	212.7	211.8	210.9	212.6	215.8	217.1	216.2	214.7	210.4	208.1	208.0
1963	204.6	202.5	200.7	201.3	201.6	206.5	210.3	211.4	207.7	205.3	200.1	202.6	204.3
1964	205.5	200.9	197.6	198.3	200.3	201.3	211.7	214.5	213.9	209.4	205.6	207.3	206.3
1965	201.8	202.1	199.5	199.8	199.2	201.9	207.5	208.6	205.8	200.0	196.2	198.7	199.8
1966	195.6	196.8	194.3	194.1	193.8	194.5	200.4	201.4	201.5	193.9	191.6	191.5	193.6
1967	187.1	188.5	184.1	183.3	186.1	185.0	188.6	192.9	193.0	188.4	184.1	184.5	187.1
1968	186.3	184.3	180.3	180.2	181.6	182.8	186.3	191.1	193.2	188.3	185.0	187.3	188.7
1969	188.4	187.4	184.3	182.5	184.7	185.2	192.4	196.7	196.5	191.3	187.1	188.7	188.5
1970	178.3	185.0	180.2	177.2	177.6	178.1	183.0	181.0	180.8	174.8	172.6	173.9	175.1
1971	173.4	171.1	167.5	165.8	168.1	170.3	177.1	177.6	179.4	175.0	175.2	176.2	176.9
1972	176.5	177.1	173.8	173.7	171.6	172.5	179.1	178.7	180.9	179.6	178.0	176.9	176.8
1973	182.0	175.4	176.8	174.8	174.5	176.6	185.0	187.9	187.8	184.5	183.5	185.5	188.6
1974	202.6	188.7	190.1	193.0	193.0	197.0	204.2	206.9	211.1	208.0	210.3	212.0	214.9
1975	223.1	214.5	216.7	216.1	215.3	220.5	225.6	228.7	230.2	223.3	226.0	227.2	231.6
1976	237.1	232.0	227.0	229.0	229.2	230.6	237.9	242.3	245.2	241.0	241.9	243.9	245.6

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SIC 12—BITUMINOUS COAL AND LIGNITE MINING (Con.)

ALL EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1985	184.7	180.3	182.6	185.3	188.0	187.9	188.8	187.2	185.6	186.1	183.2	182.4	179.3
1986	173.1	176.7	178.8	177.6	177.2	175.2	174.1	173.1	171.2	170.4	167.7	167.4	164.7
1987		(e) n	(e) n										

PRODUCTION WORKERS—IN THOUSANDS

1983	153.0	155.4	150.4	150.4	149.0	149.0	152.9	153.1	154.1	155.5	155.0	156.3	155.3
1984	155.9	155.8	154.6	157.2	159.8	160.5	162.4	162.3	161.8	161.4	149.7	145.1	141.3
1985	150.7	145.2	147.6	150.7	153.6	153.7	154.8	153.1	152.1	152.5	150.1	149.3	146.2
1986	141.5	146.8	145.8	145.0	145.2	143.3	142.1	141.1	139.7	139.5	137.4	137.5	134.9
1987		131.5	131.0										

PRODUCTION-WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

1983	551.20	532.80	521.26	523.48	532.29	534.76	543.49	542.88	565.56	570.21	571.24	576.10	594.09
1984	606.70	603.41	595.13	603.81	600.41	604.82	620.84	594.55	622.34	629.14	580.00	588.60	628.71
1985	630.36	623.32	627.68	642.33	631.40	629.12	653.91	590.97	626.11	644.23	627.48	613.93	643.72
1986	627.68	657.32	633.42	628.17	616.19	613.45	618.93	587.79	620.40	624.25	634.85	632.02	668.22
1987		667.60	674.23										

PRODUCTION-WORKER AVERAGE HOURLY EARNINGS—IN DOLLARS

1983[3]	13.77	13.32	13.40	13.32	13.51	13.47	13.69	(*)	13.93	14.01	14.07	14.26	14.35
1984[3]	14.85	14.54	14.48	14.62	14.68	14.68	14.96	(*)	14.96	15.16	14.91	15.17	15.26
1985[3]	15.30	15.24	15.46	15.33	15.40	15.27	15.35	(*)	15.16	15.23	15.12	15.31	15.40
1986[3]	15.45	15.43	15.30	15.21	15.29	15.26	15.32	(*)	15.51	15.49	15.56	15.88	15.76
1987		15.82	15.79										

PRODUCTION-WORKER AVERAGE WEEKLY HOURS

1983[3]	40.1	40.0	38.9	39.3	39.4	39.7	39.7	(*)	40.6	40.7	40.6	40.4	41.4
1984[3]	40.9	41.5	41.1	41.3	40.9	41.2	41.5	(*)	41.6	41.5	38.9	38.8	41.2
1985[3]	41.4	40.9	40.6	41.9	41.0	41.2	42.6	(*)	41.3	42.3	41.5	40.1	41.8
1986[3]	40.9	42.6	41.4	41.3	40.3	40.2	40.4	(*)	40.0	40.3	40.8	39.8	42.4
1987		42.2	42.7										

SIC 13—OIL AND GAS EXTRACTION

ALL EMPLOYEES—IN THOUSANDS

1983	597.8	634.6	614.0	600.0	585.8	582.7	585.8	593.9	592.8	588.5	593.4	598.0	603.8
1984	606.5	605.1	601.0	596.6	591.0	594.9	606.9	610.6	616.0	612.5	611.4	616.6	615.3
1985	582.9	609.7	600.7	592.4	580.1	586.8	586.6	582.4	580.2	571.4	566.4	563.5	564.0
1986	457.4	557.8	535.4	506.5	473.1	448.4	440.0	437.9	426.7	415.7	415.7	416.5	414.8
1987		412.0	408.0										

WOMEN EMPLOYEES—IN THOUSANDS

1983	93.5	97.4	96.2	95.8	94.7	93.0	92.6	93.2	93.4	91.6	91.2	91.1	91.7
1984	93.5	90.9	91.2	91.7	91.7	92.2	93.5	94.4	95.2	94.7	94.7	95.6	95.9
1985	96.1	97.0	96.7	97.3	97.0	96.7	97.0	96.5	96.5	95.1	94.9	94.8	94.2
1986	84.0	94.1	93.6	91.8	88.3	85.1	83.8	83.3	80.6	77.6	77.2	76.6	76.2
1987		75.9	75.9										

PRODUCTION WORKERS—IN THOUSANDS

1983	397.5	430.6	410.8	398.3	385.7	383.1	387.2	393.9	392.2	390.0	395.7	398.5	404.3
1984	405.3	466.5	401.6	397.6	391.7	394.9	403.8	404.7	410.7	409.3	410.4	416.3	415.0
1985	387.4	408.3	399.9	391.9	390.8	390.0	388.6	385.9	384.8	379.7	375.8	375.5	377.2
1986	292.6	372.3	353.6	327.9	299.4	279.0	273.4	273.9	269.3	263.7	264.7	267.4	267.0
1987		263.0	262.5										

See footnotes at end of tables.

SIC 13—OIL AND GAS EXTRACTION (Con.)

PRODUCTION-WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	465.21	467.78	455.82	459.24	459.03	463.08	463.28	462.44	461.10	469.92	471.80	470.80	474.10
1984	475.97	478.11	470.11	469.57	474.12	470.17	473.48	472.24	470.73	479.81	477.49	484.20	489.24
1985	488.85	482.90	485.69	486.39	485.09	484.20	488.63	485.76	486.62	490.16	485.07	495.95	510.92
1986	483.73	516.67	496.50	482.33	488.46	485.72	487.80	494.16	498.95	488.64	484.55	480.65	481.31
1987		501.62	476.84										

PRODUCTION-WORKER AVERAGE HOURLY EARNINGS—IN DOLLARS

1983	10.67	10.68	10.70	10.68	10.75	10.67	10.65	10.68	10.60	10.68	10.65	10.70	10.63
1984	10.72	10.72	10.66	10.77	10.80	10.71	10.64	10.66	10.65	10.71	10.73	10.76	10.80
1985	11.06	10.95	10.89	10.93	10.95	10.93	11.08	11.04	11.11	11.14	11.10	11.17	11.43
1986	11.59	11.31	11.44	11.53	11.63	11.62	11.70	11.71	11.74	11.69	11.62	11.61	11.67
1987		11.72	11.49										

PRODUCTION-WORKER AVERAGE WEEKLY HOURS

1983	43.6	43.8	42.6	43.0	42.7	43.4	43.5	43.3	43.5	44.0	44.3	44.0	44.6
1984	44.4	44.6	44.1	43.6	43.9	43.9	44.5	44.3	44.2	44.8	44.5	45.0	45.3
1985	44.2	44.1	44.6	44.5	44.3	44.3	44.1	44.0	43.8	44.0	43.7	44.4	44.7
1986	42.6	45.7	43.4	42.7	42.0	41.8	41.7	42.2	42.5	41.8	41.7	41.4	42.1
1987		42.8	41.5										

SIC 131,2—CRUDE PETROLEUM, NATURAL GAS, AND NATURAL GAS LIQUIDS

ALL EMPLOYEES—IN THOUSANDS

1983	264.6	267.5	265.2	263.7	262.7	263.4	267.3	269.0	268.2	263.3	261.6	262.0	261.3
1984	260.9	260.9	261.1	261.1	260.5	261.6	265.5	265.1	263.4	258.9	258.2	257.5	256.7
1985	253.5	257.1	255.7	255.0	253.8	253.3	256.9	256.9	256.2	251.8	249.5	247.8	247.6
1986	224.3	245.3	241.2	238.4	232.2	226.7	225.9	225.4	218.7	211.0	210.9	208.6	206.7
1987		206.5	204.8										

WOMEN EMPLOYEES—IN THOUSANDS

1983	61.7	62.7	62.2	61.9	61.3	61.3	62.2	62.5	62.3	61.1	60.8	61.1	61.4
1984	62.6	61.2	61.6	61.9	61.8	62.1	63.1	63.4	63.4	62.8	63.0	63.4	63.6
1985	64.2	64.2	64.1	64.2	64.1	64.3	65.0	65.1	65.0	64.1	63.8	63.7	63.2
1986	57.1	62.7	61.9	61.4	59.6	57.9	57.6	57.4	55.5	53.1	52.9	52.7	52.5
1987		52.3	51.8										

PRODUCTION WORKERS—IN THOUSANDS

1983	123.2	125.7	123.4	122.8	122.7	122.4	125.1	125.8	125.5	122.0	121.3	120.7	120.4
1984	120.4	120.7	120.3	119.7	120.7	122.2	122.0	121.4	119.1	119.9	119.4	119.2	
1985	118.0	118.6	117.8	118.1	117.1	117.2	119.5	119.8	119.8	117.3	116.6	116.5	117.3
1986	107.9	117.2	115.6	113.7	109.7	108.0	108.5	107.6	106.6	103.0	104.0	103.7	101.4
1987		101.0	100.7										

PRODUCTION-WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

1983	523.64	536.28	514.08	526.38	516.15	516.18	514.00	524.41	513.24	528.67	527.06	524.15	533.35
1984	538.47	560.64	534.25	527.44	538.83	526.19	532.14	530.87	526.68	548.27	537.21	547.41	558.06
1985	561.74	572.40	562.28	558.83	557.40	547.04	562.28	555.40	547.16	566.32	551.62	565.40	600.74
1986	567.55	635.26	604.06	595.38	585.23	568.26	580.14	580.21	592.41	577.68	563.48	573.38	581.15
1987		623.22	562.59										

DEPARTMENT OF LABOR
Bureau of Labor Statistics

BEST AVAILABLE COPY

SIC 289—MISCELLANEOUS CHEMICAL PRODUCTS (Con.)

PRODUCTION-WORKER AVERAGE WEEKLY OVERTIME HOURS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1977	3.4	3.4	3.1	3.3	3.0	3.2	3.6	3.2	3.4	3.7	3.4	3.4	3.5
1978	3.6	3.4	3.0	3.6	3.4	3.3	3.4	3.5	3.4	3.6	3.8	3.7	3.9
1979	3.5	3.5	3.3	3.2	3.0	3.3	3.1	3.1	3.7	4.0	3.8	4.1	3.6
1980	3.1	3.2	3.2	3.3	3.1	2.8	2.5	2.5	3.0	3.2	3.2	3.5	3.6
1981	3.1	3.6	3.5	3.2	2.9	2.9	2.8	2.9	3.0	3.3	3.1	3.0	2.9
1982	2.6	3.1	2.6	2.8	2.6	2.3	2.4	2.4	2.3	2.8	2.5	2.5	2.4
1983	3.0	2.4	2.4	2.8	2.7	2.9	2.8	2.7	3.0	3.6	3.4	3.4	3.4
1984		3.6	3.3	3.4	3.3	3.2	3.1	2.9					

SIC 29—PETROLEUM AND COAL PRODUCTS

ALL EMPLOYEES—IN THOUSANDS

1939	139	135	133	135	134	136	139	139	142	144	147	146	143
1940	146	141	140	141	141	142	145	146	149	151	151	151	149
1941	155	148	148	149	149	152	155	158	159	159	159	159	159
1942	160	157	157	159	160	160	161	163	162	159	159	158	159
1943	160	157	156	156	157	159	160	162	165	162	163	164	164
1944	174	163	165	166	169	174	176	178	184	178	178	179	180
1945	186	180	181	183	184	184	186	189	189	184	183	183	183
1946	200	196	197	202	205	207	209	212	214	213	213	213	213
1947	221	214	214	214	214	217	220	225	226	226	226	226	226
1948	228	226	225	226	227	229	232	233	235	232	231	228	225
1949	221	223	221	220	221	220	220	221	222	222	222	220	216
1950	212	215	215	215	207	208	212	214	227	224	225	226	226
1951	231.3	225.5	227.0	228.1	229.1	229.9	232.0	234.2	233.6	233.6	234.2	234.6	233.4
1952	234.6	229.7	230.6	231.5	235.4	236.9	233.2	235.6	244.6	243.0	242.4	241.4	240.4
1953	241.4	237.7	237.4	238.3	239.8	240.4	243.8	245.7	246.4	245.2	243.1	240.7	238.3
1954	238.1	235.7	235.8	235.8	236.6	237.7	240.5	242.2	242.0	240.7	238.0	237.1	235.5
1955	237.1	234.5	233.3	234.7	235.7	236.6	238.4	241.2	241.4	238.6	237.5	236.6	234.6
1956	235.5	232.4	232.5	235.1	234.2	234.0	236.7	237.8	241.8	238.5	236.0	234.2	232.8
1957	232.2	230.7	232.0	231.2	232.1	231.8	233.5	233.8	235.0	235.3	232.2	231.1	228.1
1958	223.8	227.1	225.4	223.6	224.0	222.5	225.7	226.7	226.1	225.8	219.6	220.3	218.3
1959	215.5	217.0	216.1	217.1	217.6	219.2	221.0	218.2	213.2	216.4	214.9	212.9	212.5
1960	211.9	212.6	212.5	212.5	212.7	213.7	215.9	215.3	214.8	212.5	209.7	206.7	203.9
1961	201.9	202.3	200.5	201.3	202.8	204.0	206.7	203.3	204.2	203.7	202.3	196.1	193.9
1962	195.3	196.5	196.5	196.2	197.5	198.4	200.1	200.1	199.2	197.0	196.4	189.2	187.0
1963	188.7	185.8	186.8	187.1	188.1	188.9	191.2	191.8	193.5	191.3	188.9	186.6	183.9
1964	183.9	182.8	182.5	182.0	182.8	184.1	186.6	186.8	186.8	185.9	184.5	181.7	179.8
1965	182.9	178.6	179.1	180.2	180.7	180.9	184.7	187.5	187.9	186.3	184.4	183.0	181.5
1966	184.2	180.0	180.5	181.2	182.9	185.0	188.0	191.6	190.2	186.2	183.2	181.9	180.1
1967	183.2	177.8	177.9	177.2	179.9	181.3	186.1	187.9	188.5	187.4	186.3	184.7	182.8
1968	186.8	181.1	182.2	183.0	184.0	185.9	190.7	192.5	192.1	188.2	187.9	187.2	185.6
1969	182.3	174.6	165.7	182.9	186.6	187.8	192.3	194.7	194.3	190.9	190.7	189.8	187.5
1970	191.2	186.6	187.1	188.4	188.1	190.0	195.6	196.5	196.0	192.0	191.3	190.8	189.7
1971	194.2	188.9	188.1	188.9	191.6	194.1	197.9	199.5	199.2	197.8	195.8	195.2	193.7
1972	195.4	188.2	192.0	192.0	193.8	196.4	200.6	200.7	200.5	197.4	196.2	194.5	191.9
1973	192.9	188.1	186.1	187.4	187.1	191.1	196.5	197.3	198.5	197.4	195.3	194.3	193.6
1974	197.0	191.7	190.8	192.1	193.7	198.1	202.4	203.5	202.2	198.5	197.9	198.2	194.7
1975	194.4	186.0	181.9	185.6	187.3	193.2	198.2	202.0	201.6	200.2	198.6	199.4	197.2
1976	198.5	194.7	194.0	195.1	197.2	198.7	201.7	202.8	202.4	200.3	199.2	198.7	196.9
1977	202.3	193.8	191.1	194.4	199.5	202.9	207.2	209.2	208.0	206.6	206.1	205.5	203.7
1978	207.7	201.3	202.0	203.8	205.8	207.1	212.3	212.3	212.3	210.1	209.9	208.7	206.7
1979	209.8	203.4	203.0	205.3	207.3	209.3	213.0	213.8	213.7	213.2	213.0	212.2	210.1

See footnotes at end of tables.

SIC 29—PETROLEUM AND COAL PRODUCTS (Con.)

ALL EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1980	197.9	200.9	195.1	192.1	192.7	203.5	209.5	212.8	213.5	212.3	212.1	212.3	210.0
1981	214.0	210.0	209.3	211.3	213.4	216.6	218.8	219.4	218.5	215.4	213.8	212.6	208.7
1982	208.8	208.4	208.5	208.8	208.7	209.1	209.9	209.1	207.9	204.5	202.4	200.4	196.9
1983	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1984	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

WORKER EMPLOYEES—IN THOUSANDS

1950		10.6			10.4			11.1			12.0		
1951		12.4			12.4			12.6			13.1		
1952		13.6			14.8			15.5			15.8		
1953		15.5			15.1			15.7			15.6		
1954		15.3			15.4			16.0			16.4		
1955		16.4			16.3			17.1			17.1		
1956		17.2			16.9			17.8			17.0		
1957		17.1			16.9			17.3			17.4		
1958		17.0			16.9			17.2			17.4		
1959	17.5	17.5	17.0	17.5	17.5	17.6	17.8	17.6	17.7	17.5	17.4	17.4	17.4
1960	17.2	17.4	17.3	17.3	17.4	17.4	17.4	17.1	17.4	17.2	16.9	16.8	16.8
1961	16.8	16.6	16.3	16.5	16.4	16.9	16.7	16.7	16.8	16.7	16.5	16.5	16.3
1962	16.3	16.3	16.3	16.2	16.3	16.3	16.5	16.6	16.6	16.3	16.1	16.0	15.8
1963	15.9	15.8	15.8	15.9	15.4	15.8	15.9	16.0	16.1	16.0	15.8	15.8	15.8
1964	16.1	15.7	15.7	15.7	16.0	16.1	16.3	16.3	16.3	16.2	16.0	16.2	16.1
1965	16.1	16.0	16.0	15.9	15.9	15.8	16.0	16.3	16.3	16.3	16.2	16.3	16.3
1966	16.5	16.3	16.3	16.5	16.4	16.4	16.6	17.2	16.0	16.4	16.5	16.3	16.3
1967	16.4	15.9	16.0	16.0	16.1	16.2	16.3	16.8	16.9	16.7	16.6	16.6	16.6
1968	16.9	16.3	16.3	16.4	16.6	16.8	16.9	17.4	17.5	17.2	17.1	17.1	17.0
1969	16.9	13.1	16.3	17.3	17.3	17.2	17.5	17.6	17.7	17.3	17.2	17.4	17.4
1970	17.8	17.4	17.4	17.7	17.8	17.9	18.0	18.2	18.2	18.0	17.9	17.8	17.8
1971	17.8	17.7	17.6	17.5	18.6	17.6	17.8	17.9	17.9	17.8	17.7	17.6	17.9
1972	18.2	17.6	18.0	18.1	18.2	18.1	18.5	18.5	18.5	18.5	18.3	18.3	18.2
1973	18.2	18.0	18.1	18.1	18.1	18.0	18.3	18.5	18.6	18.3	18.0	18.1	18.0
1974	18.7	18.0	18.1	18.2	18.2	18.5	18.8	18.9	19.2	19.0	19.1	19.1	19.0
1975	19.6	19.4	18.9	19.4	19.4	19.5	19.9	20.2	19.9	19.6	19.7	19.7	19.9
1976	20.7	19.0	20.0	19.8	20.2	20.4	20.8	21.2	21.3	21.1	21.2	21.1	21.4
1977	23.4	21.7	22.1	22.7	23.2	23.3	24.1	24.6	24.5	23.9	23.7	23.7	23.8
1978	24.6	23.7	23.8	24.0	24.4	24.7	25.3	25.4	25.3	24.9	24.7	24.8	24.6
1979	26.3	24.5	24.6	25.0	25.3	25.6	26.9	27.2	27.1	27.1	27.3	27.2	27.5
1980	27.0	27.7	27.0	27.1	27.5	28.0	28.2	28.0	28.6	28.4	28.3	28.6	29.1
1981	30.9	29.4	29.5	29.8	30.2	30.7	31.5	32.0	32.0	31.5	31.5	31.5	31.5
1982	31.0	30.9	30.9	31.0	30.9	31.2	31.2	31.5	31.2	31.3	30.9	30.8	30.6
1983	30.2	30.4	30.3	30.0	29.9	30.1	30.5	30.4	30.3	30.1	30.0	30.2	30.0
1984		30.0	29.9	29.9	29.9	30.0	30.4	30.6					

PRODUCTION WORKERS—IN THOUSANDS

1939	100	95	94	95	95	98	99	100	102	104	106	105	102
1940	105	101	100	101	101	102	105	106	108	110	109	108	107
1941	114	107	106	109	109	111	114	117	118	118	119	120	119
1942	124	119	119	122	123	123	125	126	127	127	126	126	126
1943	130	126	125	125	127	129	129	132	133	132	133	134	134
1944	142	133	136	136	139	141	143	146	152	146	145	145	146
1945	148	146	147	148	148	148	149	150	151	145	144	152	153
1946	161	156	153	158	159	160	162	164	166	165	164	163	163

DEPARTMENT OF LABOR
Bureau of Labor Statistics

SIC 29—PETROLEUM AND COAL PRODUCTS

ALL EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	195.6	194.7	193.9	194.3	196.7	197.3	199.6	199.3	198.3	197.1	193.6	192.2	189.7
1984	188.9	186.9	186.8	187.7	188.4	190.0	191.8	192.5	192.1	190.2	189.2	187.8	183.8
1985	179.3	181.7	180.4	180.3	181.5	182.5	184.2	183.8	182.1	175.0	174.7	173.6	171.5
1986	168.8	169.4	168.4	169.5	170.8	172.0	172.5	172.1	171.0	168.4	166.1	164.5	160.5
1987		160.6	160.7										

WOMEN EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	30.2	30.4	30.3	30.0	30.0	30.1	30.5	30.4	30.3	29.9	30.0	30.0	30.0
1984	29.9	30.0	30.2	30.1	30.0	30.0	30.5	30.8	30.1	29.6	29.2	29.3	29.3
1985	28.4	29.1	29.1	28.7	28.9	29.0	29.3	28.9	28.5	27.5	27.4	27.2	27.2
1986	25.9	27.0	26.9	26.8	26.5	26.4	26.4	26.3	25.8	25.3	24.7	24.5	24.3
1987		24.0	23.9										

PRODUCTION WORKERS—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	118.0	116.2	116.3	117.9	119.5	119.7	121.1	121.1	120.5	119.3	117.1	114.9	111.8
1984	111.3	108.5	108.3	109.4	110.8	111.9	113.1	113.3	113.5	113.5	113.2	112.2	108.2
1985	108.5	107.4	107.2	107.8	108.7	109.7	110.7	111.3	111.4	107.6	107.6	107.1	105.1
1986	105.9	103.9	103.5	104.3	106.1	107.5	108.5	108.5	108.5	107.0	106.2	105.1	102.1
1987		102.6	102.6										

PRODUCTION-WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	582.99	572.90	574.16	584.32	581.66	575.97	579.92	585.20	572.46	592.29	585.17	590.92	602.55
1984	587.33	593.15	583.77	585.11	589.58	580.32	579.42	580.79	584.31	598.03	590.82	596.01	585.16
1985	604.58	598.34	595.43	602.62	595.40	584.22	597.37	606.96	605.66	621.37	618.76	610.64	621.85
1986	621.08	615.60	612.02	620.98	617.92	607.60	624.10	621.62	624.26	625.34	622.94	630.08	628.28
1987		645.45	629.73										

PRODUCTION-WORKER AVERAGE HOURLY EARNINGS—IN DOLLARS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	13.28	13.17	13.26	13.28	13.28	13.18	13.18	13.21	13.16	13.37	13.36	13.43	13.51
1984	13.44	13.45	13.42	13.42	13.43	13.31	13.32	13.26	13.31	13.53	13.52	13.67	13.64
1985	14.06	13.98	14.01	14.08	14.21	14.01	13.99	14.05	14.02	14.09	13.99	14.07	14.23
1986	14.18	14.25	14.20	14.21	14.14	14.00	14.12	14.16	14.06	14.18	14.19	14.32	14.41
1987		14.57	14.51										

PRODUCTION-WORKER AVERAGE WEEKLY HOURS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	43.9	43.5	43.3	44.0	43.8	43.7	44.0	44.3	43.5	44.3	43.8	44.0	44.6
1984	43.7	44.1	43.5	43.6	43.9	43.6	43.5	43.8	43.9	44.2	43.7	43.6	42.5
1985	43.0	42.8	42.5	42.8	41.9	41.7	42.7	43.2	43.2	44.1	44.3	43.4	43.7
1986	43.8	43.2	43.1	43.7	43.7	43.4	44.2	43.9	44.4	44.1	43.9	44.0	43.6
1987		44.3	43.4										

PRODUCTION-WORKER AVERAGE WEEKLY OVERTIME HOURS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	4.0	3.5	3.6	3.9	4.0	3.9	4.0	4.3	3.9	4.3	4.4	4.3	4.2
1984	4.2	4.3	4.0	4.2	4.3	4.2	4.3	4.5	4.4	4.6	4.4	4.0	3.6
1985	4.2	3.6	3.7	3.5	4.1	3.3	4.3	4.3	4.2	4.5	5.0	4.4	4.1
1986	4.5	4.0	4.0	4.5	4.4	4.0	4.4	4.7	4.8	4.7	5.1	4.9	4.8
1987		4.5	4.5										

SIC 291—PETROLEUM REFINING

ALL EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	158.2	161.7	160.9	159.9	160.2	159.6	160.4	159.3	158.2	157.0	154.0	153.5	153.8
1984	151.1	152.6	151.8	151.9	151.1	151.4	152.0	152.4	152.1	150.3	149.6	149.5	148.5
1985	141.4	147.6	146.2	144.9	144.2	143.6	144.4	143.6	142.2	135.3	135.1	135.0	134.9
1986	130.7	134.1	133.5	133.5	133.0	132.6	132.7	132.1	130.7	128.4	127.0	126.2	124.2
1987		124.5	124.6										

See footnotes at end of tables

DEPARTMENT OF LABOR
Bureau of Labor Statistics

SIC 291—PETROLEUM REFINING (Con.)

WOMEN EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	25.5	25.8	25.7	25.4	25.4	25.4	25.8	25.7	25.6	25.4	25.0	25.1	25.3
1984	25.1	25.3	25.4	25.4	25.3	25.3	25.6	25.8	25.1	24.6	24.3	24.5	24.6
1985	23.3	24.3	24.2	23.9	23.9	23.9	24.1	23.7	23.3	22.2	22.0	21.9	22.0
1986	20.8	21.8	21.7	21.6	21.3	21.2	21.2	21.1	20.6	20.1	19.6	19.5	19.3
1987		19.2	19.0										

PRODUCTION WORKERS—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	91.4	93.8	93.9	94.1	93.8	92.7	92.7	92.0	91.3	90.1	88.1	87.2	88.8
1984	84.3	84.9	84.0	84.1	84.2	84.1	84.2	84.2	84.5	84.4	84.3	84.6	83.5
1985	81.7	84.0	83.6	83.0	82.3	81.8	82.2	82.7	82.8	79.1	79.4	79.8	79.8
1986	79.0	79.7	79.6	79.6	79.5	79.4	79.9	79.8	79.5	78.4	78.2	77.9	76.8
1987		77.9	77.7										

PRODUCTION-WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	633.39	618.72	620.10	633.59	633.93	627.54	626.45	633.49	622.61	647.59	640.33	647.59	657.71
1984	636.71	644.47	634.66	638.00	642.54	631.33	627.70	626.70	630.75	648.12	640.48	649.72	632.88
1985	657.28	647.79	647.36	657.28	648.32	633.83	646.34	657.90	655.32	674.52	671.84	669.68	678.23
1986	674.52	671.45	668.61	682.63	674.96	658.16	677.79	677.38	672.28	674.96	673.21	682.22	677.15
1987		697.99	682.34										

PRODUCTION-WORKER AVERAGE HOURLY EARNINGS—IN DOLLARS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	14.33	14.03	14.19	14.27	14.31	14.23	14.27	14.30	14.28	14.52	14.52	14.52	14.54
1984	14.57	14.45	14.49	14.50	14.57	14.48	14.53	14.44	14.50	14.73	14.69	14.80	14.65
1985	15.25	15.03	15.09	15.25	15.51	15.31	15.28	15.30	15.24	15.33	15.20	15.22	15.31
1986	15.33	15.33	15.30	15.34	15.34	15.20	15.30	15.36	15.21	15.41	15.37	15.40	15.46
1987		15.65	15.65										

PRODUCTION-WORKER AVERAGE WEEKLY HOURS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	44.2	44.1	43.7	44.4	44.3	44.1	43.9	44.3	43.6	44.6	44.1	44.6	45.2
1984	43.7	44.6	43.8	44.0	44.1	43.6	43.2	43.4	43.5	44.0	43.6	43.9	43.2
1985	43.1	43.1	42.9	43.1	41.8	41.4	42.3	43.0	43.0	44.0	44.2	44.0	44.3
1986	44.0	43.8	43.7	44.5	44.0	43.3	44.3	44.1	44.2	43.8	43.8	44.3	43.8
1987		44.6	43.6										

PRODUCTION-WORKER AVERAGE WEEKLY OVERTIME HOURS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	3.6	3.3	3.3	3.6	3.9	3.6	3.3	3.6	3.2	3.6	3.9	4.0	4.1
1984	3.8	4.1	3.7	4.0	4.1	3.8	3.6	3.7	3.5	3.9	3.8	3.8	3.4
1985	3.8	3.5	3.7	3.4	3.9	3.5	3.9	3.7	3.5	3.8	4.4	4.2	4.4
1986	4.1	4.0	3.9	4.5	4.1	3.4	3.7	4.0	4.0	3.9	4.5	4.5	4.3
1987		4.2	4.2										

SIC 295—PAVING AND ROOFING MATERIALS

ALL EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	26.3	21.9	21.9	23.3	25.3	26.7	28.1	29.0	29.0	29.1	28.6	27.6	25.0
1984	26.7	23.3	23.9	24.7	26.3	27.5	28.6	28.8	28.6	28.6	28.3	27.1	24.1
1985	26.3	22.7	22.8	24.0	25.9	27.4	28.1	28.5	28.3	28.1	27.9	27.0	25.0
1986	26.6	23.6	23.3	24.4	26.2	27.7	28.1	28.4	28.7	28.5	27.9	27.2	25.1
1987		24.5	24.8										

PRODUCTION WORKERS—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	19.8	15.8	15.8	17.1	19.0	20.3	21.6	22.3	22.3	22.3	22.1	20.8	18.2
1984	20.1	16.8	17.4	18.3	19.7	20.8	21.8	22.0	21.9	22.0	21.8	20.7	17.8
1985	19.9	16.5	16.7	18.0	19.6	21.0	21.5	21.7	21.6	21.6	21.4	20.5	18.6
1986	20.3	17.3	17.1	18.0	19.9	21.3	21.7	22.0	22.2	22.0	21.6	21.0	19.0
1987		18.3	18.5										

BEST AVAILABLE COPY

Produce Price Index

Fuels and related products and power

BASE 1967 = 100

YR	ANN AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1926	71.5	70.7	71.0	70.4	70.1	72.1	72.2	71.2	71.8	72.4	72.4	73.1	71.0
1927	63.2	70.3	69.0	65.3	62.2	61.5	61.7	61.7	61.6	61.8	61.6	60.9	60.6
1928	60.4	59.3	59.5	59.2	59.3	59.7	60.0	60.4	61.4	61.8	61.6	61.4	61.0
1929	59.4	60.2	59.3	58.8	58.6	59.0	60.5	59.6	58.9	59.2	59.5	59.6	59.6
1930	56.2	58.5	57.9	56.8	56.9	57.4	56.5	55.9	55.8	56.6	55.5	54.0	53.0
1931	48.3	52.5	51.9	48.8	46.8	46.6	45.0	45.1	47.6	48.2	48.6	49.6	48.8
1932	50.3	48.6	48.8	48.6	50.2	50.7	51.3	51.7	51.5	50.7	50.9	51.1	49.6
1933	47.6	47.3	45.6	45.0	43.9	43.1	44.0	46.6	46.9	50.4	52.7	52.6	52.5
1934	52.4	52.3	51.8	51.2	51.4	51.8	52.0	52.8	53.4	53.4	53.4	53.3	52.7
1935	52.6	52.1	51.8	52.2	52.0	52.3	53.1	53.4	53.0	52.2	52.5	53.3	53.4
1936	54.5	53.8	54.4	54.5	54.7	54.3	54.4	54.5	54.6	54.4	54.9	54.9	54.7
1937	55.5	54.7	54.9	54.5	54.9	55.2	55.4	55.9	56.1	56.3	56.2	56.0	56.1
1938	54.6	56.1	56.1	55.5	54.9	54.5	54.6	54.9	54.9	54.8	54.0	52.7	52.4
1939	52.3	52.0	52.2	52.2	52.5	52.8	52.2	52.0	51.9	52.0	52.8	53.0	52.0
1940	51.4	52.0	51.8	51.6	51.4	51.4	51.1	50.9	50.9	50.8	51.3	51.4	51.4
1941	54.6	51.5	51.5	51.5	52.1	54.1	55.7	56.1	56.6	56.8	56.9	56.4	56.1
1942	56.2	56.0	55.8	55.6	55.5	55.8	56.1	56.5	56.6	56.5	56.5	56.6	56.8
1943	57.8	56.8	57.0	57.4	57.6	57.8	57.9	57.9	57.9	58.0	57.9	58.1	58.8
1944	59.5	58.9	59.5	59.4	59.5	59.6	59.6	59.6	59.6	59.5	59.4	59.5	59.5
1945	60.1	59.6	59.6	59.7	59.7	59.9	60.0	60.3	60.7	60.2	60.2	60.5	60.6
1946	64.4	60.8	60.9	60.9	61.6	61.6	62.8	64.6	67.6	67.5	67.4	67.6	68.8
1947	76.9	69.9	70.6	72.5	74.7	74.8	75.2	77.7	79.2	79.5	80.2	82.6	85.8
1948	90.5	89.3	89.9	89.8	90.1	90.2	90.3	91.5	91.0	90.9	91.3	91.4	90.9
1949	86.2	90.5	89.3	87.7	86.2	85.2	84.7	84.7	84.6	84.9	85.6	85.4	85.3
1950	87.1	85.7	86.0	85.8	85.1	86.0	86.6	87.4	87.7	88.3	88.7	89.1	88.5
1951	90.3	90.0	90.8	90.7	90.1	89.8	89.9	90.1	89.9	90.2	90.3	90.3	90.8
1952	90.1	90.8	90.6	90.8	89.9	89.6	89.5	89.6	89.5	89.8	90.2	90.2	90.6
1953	92.6	91.1	91.4	91.6	90.8	90.5	91.5	93.9	93.8	93.7	94.0	94.0	93.9
1954	91.3	93.6	93.4	92.3	91.8	91.5	91.1	89.8	90.3	90.3	90.3	90.8	90.8
1955	91.2	91.7	91.9	91.7	90.8	90.4	90.3	90.0	90.6	91.3	91.3	91.8	92.4
1956	94.0	93.8	94.0	93.7	93.5	93.6	93.4	93.5	93.7	93.9	94.4	94.0	94.3
1957	99.1	98.3	101.1	100.8	101.0	100.2	99.0	98.4	98.3	98.2	97.9	97.8	98.3
1958	95.3	98.2	96.0	95.0	93.8	93.2	93.5	94.6	96.1	96.4	95.6	95.2	95.5
1959	95.3	96.2	97.0	97.2	96.3	95.8	94.0	93.9	94.9	94.6	94.2	94.0	94.4
1960	96.1	94.6	94.7	94.9	94.4	[illegible]	94.9	96.2	97.5	98.2	98.3	98.2	98.3
1961	97.2	99.0	99.5	99.3	97.4	96.0	96.6	96.9	96.7	96.1	95.6	96.3	97.1
1962	96.7	97.5	96.9	95.5	96.7	96.2	96.1	96.5	96.0	97.3	97.3	97.2	97.3
1963	96.3	96.9	96.8	97.3	96.8	96.9	97.4	96.9	95.5	95.6	95.4	94.5	95.8
1964	93.7	96.0	95.6	93.6	92.8	93.1	93.0	93.3	93.1	91.9	93.3	94.2	94.7
1965	95.5	95.1	94.5	94.5	94.2	95.0	95.3	95.3	95.6	95.8	95.9	96.8	97.1
1966	97.8	97.0	96.8	96.4	96.5	96.9	98.0	97.9	98.5	98.6	99.0	99.1	98.8
1967	100.0	99.0	99.8	100.1	99.7	100.8	100.5	100.3	101.2	100.9	99.5	99.2	99.0
1968	98.9	98.4	98.9	98.5	98.8	98.8	100.1	99.9	99.0	99.0	98.5	98.6	98.6
1969	100.9	98.6	99.0	100.5	100.8	100.8	101.2	101.3	101.2	101.1	101.7	101.8	102.5
1970	106.2	101.9	102.7	102.7	103.8	105.0	105.0	105.6	106.4	107.9	109.2	110.2	113.9
1971	115.2	114.2	114.1	114.0	113.7	114.9	115.1	115.8	116.2	116.2	115.7	115.7	117.0
1972	118.6	116.0	116.1	116.5	116.9	117.5	118.2	118.6	119.7	120.3	120.6	121.3	121.9
1973	134.3	122.2	126.0	127.4	129.2	131.1	133.4	134.7	135.2	137.4	139.3	144.1	151.5
1974	208.3	162.5	177.4	189.0	197.9	204.3	210.5	221.7	226.0	225.0	228.5	227.4	229.0

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PPI 05 Fuels and related products and power

BASE 1967 = 100

YR	ANN AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1975	245.1	232.2	232.3	233.0	236.5	238.8	243.0	246.6	252.4	254.9	256.5	257.0	258.0
1976	265.6	257.2	255.6	255.8	257.0	257.2	260.5	265.3	269.2	271.2	277.1	281.6	279.0
1977	302.2	278.8	289.1	293.7	298.8	302.4	304.3	307.0	309.5	309.9	310.7	310.5	312.0
1978	322.5	312.8	312.9	315.3	317.3	319.7	323.2	324.5	324.9	326.7	328.5	329.7	334.3
1979	408.1	338.1	342.5	350.9	361.5	377.6	393.7	411.8	432.8	454.8	468.5	476.9	487.9
1980	574.0	508.0	532.7	553.5	566.6	572.1	576.5	585.5	590.6	593.5	592.9	600.2	615.7
1981	694.5	634.6	667.5	696.5	707.2	709.0	707.6	704.9	704.3	703.5	698.1	698.1	702.5
1982	693.2	705.1	697.8	689.7	670.6	662.2	677.3	701.1	705.6	700.4	698.8	706.1	703.4
1983	664.7	683.6	668.6	658.0	644.8	651.9	665.5	668.7	671.7	672.3	669.5	663.7	658.0
1984	656.8	652.1	656.0	658.7	654.7	640.6	645.9	645.0	657.9	652.3	654.4	655.3	648.5
1985	633.6	636.8	625.3	625.3	633.9	647.3	640.6	635.4	627.6	628.6	628.0	634.7	639.6
1986	483.5	620.3	567.0	512.1	482.4	483.8	484.7	444.3	438.4	452.6	438.8	438.5	439.6
1987	NA	461.6	471.5	473.2	478.9	483.0	492.6	505.7	511.8	501.1	492.9	NA	NA

NA NOT AVAILABLE

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SIC 24,25,32–39—DURABLE GOODS (Con.)

PRODUCTION-WORKER AVERAGE WEEKLY OVERTIME HOURS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1970	3.0	3.3	3.0	3.1	2.9	3.0	3.2	3.0	3.0	3.1	2.8	2.7	2.7
1971	2.9	2.6	2.6	2.7	2.6	2.8	3.0	2.7	2.8	3.0	3.1	3.0	3.2
1972	3.6	2.9	3.0	3.2	3.4	3.4	3.7	3.4	3.7	4.1	4.0	4.1	4.2
1973	4.1	3.9	4.1	3.9	4.2	4.1	4.2	4.0	4.0	4.4	4.2	4.2	4.1
1974	3.4	3.5	3.4	3.6	2.7	3.6	3.6	3.4	3.6	3.8	3.6	3.1	3.0
1975	2.6	2.4	2.3	2.3	2.2	2.2	2.4	2.4	2.7	3.0	2.9	2.8	3.1
1976	3.2	2.8	2.9	3.1	2.3	3.3	3.4	3.2	3.4	3.6	3.4	3.4	3.6
1977	3.7	3.2	3.2	3.4	3.4	3.6	3.8	3.6	3.7	4.0	4.0	3.9	4.0
1978	3.8	3.4	3.7	3.7	3.7	3.6	3.8	3.7	3.7	4.2	4.1	4.1	4.3
1979	3.5	3.8	3.9	3.9	2.6	3.6	3.6	3.4	3.4	3.6	3.5	3.4	3.5
1980	2.8	3.1	3.0	3.1	2.7	2.5	2.4	2.3	2.6	2.9	2.8	3.1	3.4
1981	2.8	2.9	2.8	2.9	2.7	3.0	3.0	2.8	2.9	2.8	2.7	2.5	2.6
1982	2.2	2.1	2.2	2.2	2.0	2.2	2.3	2.1	2.2	2.2	2.1	2.2	2.4
1983	3.0	2.1	2.2	2.4	2.6	2.6	2.9	2.9	3.1	3.5	3.5	3.6	3.8
1984		3.5	3.6	3.6	3.6	3.5	3.6	3.4					

SIC 24—LUMBER AND WOOD PRODUCTS

ALL EMPLOYEES—IN THOUSANDS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1947	873	863	861	868	874	880	886	870	862	888	880	868	850
1948	846	830	829	833	835	822	838	836	865	879	867	856	812
1949	788	757	744	758	748	784	778	767	788	776	784	786	778
1950	837	739	742	773	788	826	851	863	886	907	904	894	872
1951	870.1	857.7	853.7	848.5	874.3	881.9	904.2	879.7	887.4	881.3	876.8	856.8	831.4
1952	821.2	785.4	791.9	791.1	801.4	765.5	834.8	855.4	871.0	862.0	845.0	836.0	814.6
1953	803.4	785.3	787.8	801.7	812.8	824.8	840.5	823.5	827.1	813.0	802.7	782.4	740.2
1954	737.6	702.0	708.3	730.5	725.7	751.6	771.1	688.4	686.0	766.0	786.9	774.9	754.4
1955	771.1	724.0	734.9	726.4	738.5	786.1	802.4	790.5	813.2	808.4	801.6	784.8	763.9
1956	762.8	751.0	752.6	734.8	760.0	778.7	790.0	791.0	798.6	781.0	761.0	734.1	710.7
1957	687.1	681.8	676.5	665.5	677.9	708.1	720.3	718.7	715.2	700.8	687.1	667.5	647.5
1958	645.6	619.2	606.3	601.4	606.2	627.1	655.0	660.5	670.3	679.4	694.1	672.8	664.5
1959	693.4	661.8	644.6	658.6	674.1	708.4	724.8	727.5	731.5	724.3	712.1	696.1	682.7
1960	639.9	653.2	648.3	638.7	660.5	676.5	686.3	680.2	680.3	676.8	657.8	629.3	598.1
1961	614.4	582.3	571.5	573.3	594.7	617.7	644.2	641.3	647.3	643.4	634.3	619.8	602.6
1962	624.0	583.6	582.8	598.6	611.0	629.9	653.5	648.5	657.1	647.6	638.7	626.3	608.0
1963	631.0	601.2	598.8	602.8	616.1	640.3	630.7	634.0	654.2	652.2	654.7	646.1	631.1
1964	647.1	611.8	615.6	617.8	632.4	647.6	670.2	673.8	677.5	672.1	661.0	650.9	635.7
1965	654.0	618.6	618.8	630.4	638.2	654.1	675.9	676.7	681.6	673.0	666.9	663.5	657.0
1966	665.5	644.4	645.7	652.4	662.0	670.5	687.8	681.6	683.8	674.4	662.8	653.4	637.0
1967	648.1	629.1	631.3	633.7	638.0	643.2	672.1	667.2	668.8	650.2	655.2	650.8	642.1
1968	661.3	627.4	635.9	641.2	645.8	652.4	677.7	680.4	685.0	675.9	674.9	669.7	669.7
1969	677.7	658.4	664.3	670.5	668.4	683.1	707.1	697.7	698.5	684.0	671.1	667.1	662.1
1970	645.5	648.2	642.2	642.8	641.1	644.6	661.9	654.3	656.4	650.7	643.4	635.3	625.5
1971	668.9	616.2	623.0	638.0	644.0	658.0	686.4	691.8	689.5	688.9	698.9	693.7	694.2
1972	725.6	676.1	682.5	689.7	699.1	718.9	746.3	750.8	757.9	753.0	753.0	749.0	738.6
1973	758.2	729.0	737.6	745.4	752.2	761.1	788.1	788.8	785.9	774.0	764.0	752.9	738.4
1974	712.3	716.9	721.2	729.7	738.6	746.1	760.2	751.7	748.9	715.2	677.6	636.9	613.1
1975	614.7	576.3	588.1	572.2	583.9	608.0	635.1	636.3	648.5	644.1	644.0	632.0	626.6
1976	679.6	627.1	638.2	641.5	656.2	672.9	698.5	707.0	712.8	710.0	705.0	696.0	690.1
1977	721.9	671.7	676.6	686.6	701.4	716.4	740.1	730.3	750.7	750.5	749.8	742.5	737.5
1978	754.7	723.1	721.4	729.2	742.2	752.4	778.1	773.1	778.7	769.8	766.9	762.2	750.4
1979	765.9	744.7	744.0	752.8	756.1	771.8	792.1	786.2	789.4	786.0	781.5	758.7	738.2

See footnotes at end of tables.

SIC 24—LUMBER AND WOOD PRODUCTS (Con.)

ALL EMPLOYEES—IN THOUSANDS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1980	690.5	719.5	721.0	719.1	681.0	658.6	670.8	670.6	688.7	695.0	692.2	688.7	681.3
1981	666.2	666.0	664.1	666.7	676.4	691.8	697.9	694.8	688.0	676.6	648.9	623.3	600.1
1982	587.5	578.4	584.0	583.0	589.9	599.5	611.2	609.3	614.7	615.1	603.4	593.9	587.6
1983	[illegible]												
1984													

WORKER EMPLOYEES—IN THOUSANDS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1950		54.3			56.5			56.6			60.4		
1951		58.7			61.9			60.5			58.7		
1952		55.7			56.1			50.0			60.1		
1953		54.9			55.3			55.4			53.9		
1954		50.4			50.1			46.3			49.9		
1955		47.2			46.8			46.8			49.2		
1956		51.0			50.3			47.9			48.0		
1957		50.9			50.4			50.5			50.0		
1958		46.6			45.8			46.2			48.7		
1959	48.3	47.5	46.7	47.9	48.3	49.2	48.7	48.3	50.1	48.8	48.8	48.2	47.5
1960	46.8	47.3	47.3	47.2	47.5	47.5	47.3	46.4	47.3	46.8	46.5	45.5	44.5
1961	45.4	44.3	44.4	44.3	44.7	45.2	46.2	45.6	46.3	45.9	46.3	46.2	45.8
1962	46.7	45.1	46.0	46.1	46.4	47.1	47.6	46.7	47.7	47.4	47.5	46.7	45.8
1963	46.2	43.7	44.0	45.0	46.0	46.8	46.4	45.8	46.8	47.9	48.0	47.5	46.6
1964	47.5	45.2	45.7	46.1	47.1	47.4	48.2	47.7	48.3	48.9	48.6	48.6	48.4
1965	50.1	47.3	47.5	48.0	48.8	48.9	50.5	49.7	51.1	51.7	52.4	53.0	52.8
1966	57.6	52.6	53.3	54.3	55.9	57.0	58.9	57.8	59.2	60.1	61.2	61.1	60.1
1967	62.3	59.6	59.9	60.5	61.0	61.4	63.3	62.6	63.7	63.5	64.2	64.4	63.6
1968	67.3	62.9	63.8	64.5	65.2	66.0	67.4	66.2	68.3	69.6	70.4	71.7	71.5
1969	72.7	69.7	71.6	71.4	72.4	74.7	75.4	72.9	73.3	73.5	72.8	72.9	72.0
1970	69.1	71.1	70.3	70.3	70.2	69.4	69.9	67.2	68.7	68.7	68.7	68.4	66.8
1971	68.9	65.7	66.3	66.8	67.8	69.5	70.6	69.1	70.9	72.4	73.4	73.4	73.3
1972	79.6	72.6	73.6	74.3	76.4	77.7	79.4	79.2	82.4	83.1	85.0	85.5	85.7
1973	91.4	84.6	85.7	87.6	89.7	91.7	93.0	92.0	94.3	94.4	95.3	94.7	93.2
1974	88.8	90.6	90.4	91.5	92.5	94.0	93.7	92.4	91.2	88.0	84.6	78.8	76.4
1975	75.4	71.6	70.0	71.0	73.1	74.0	76.0	76.0	78.2	79.1	79.2	78.3	77.5
1976	86.0	79.2	79.6	80.6	82.3	84.8	86.6	88.6	90.3	90.4	89.9	90.7	89.3
1977	96.8	88.7	89.1	91.1	93.3	96.0	98.0	98.0	99.1	101.1	102.5	102.7	102.0
1978	107.5	101.7	101.5	102.7	105.1	106.6	108.9	108.1	108.9	110.4	111.0	111.9	111.5
1979	114.7	110.1	110.4	112.9	113.9	115.5	117.3	115.5	116.7	118.1	119.1	114.9	112.2
1980	103.2	108.1	110.2	110.4	104.1	98.1	97.8	96.4	100.7	103.1	102.5	102.6	101.8
1981	101.2	100.6	100.6	100.9	102.9	105.4	105.4	104.2	104.0	102.6	98.1	95.8	93.0
1982	89.9	89.7	88.8	89.1	89.4	90.4	91.3	90.4	90.9	91.3	89.9	89.1	88.8
1983	96.9	87.7	88.8	90.4	93.0	96.1	98.7	98.5	100.4	102.5	102.8	102.3	101.7
1984		101.2	101.7	103.8	105.7	107.1	108.1	108.2					

PRODUCTION WORKERS—IN THOUSANDS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1947	807	793	793	802	810	823	822	803	815	813	815	801	791
1948	781	774	765	769	759	757	776	770	821	812	801	784	747
1949	703	683	681	685	685	698	712	703	714	711	718	720	711
1950	770	665	677	708	723	760	782	794	831	839	835	824	803
1951	796.9	785.7	780.0	775.5	801.6	819.5	830.8	804.9	813.5	807.9	803.8	782.7	756.3
1952	745.9	710.5	717.0	716.3	728.5	688.7	757.7	778.9	794.7	787.3	770.2	761.8	740.0
1953	727.5	710.3	711.1	724.4	735.9	746.8	763.3	747.9	750.4	737.5	728.2	708.1	666.3
1954	665.0	629.6	636.8	648.4	653.1	678.6	697.7	616.3	623.0	693.9	713.7	706.4	682.7

BEST AVAILABLE COPY

SIC 24—LUMBER AND WOOD PRODUCTS

ALL EMPLOYEES—IN THOUSANDS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1983	656.5	582.1	591.2	602.0	620.7	644.6	675.8	684.8	701.3	704.5	701.0	691.1	679.3
1984	703.5	668.9	674.5	685.1	694.1	707.1	727.8	725.9	729.1	723.6	714.9	700.9	690.3
1985	697.3	675.1	672.6	677.3	678.1	695.2	713.0	714.9	723.6	718.2	711.8	699.9	687.3
1986	710.5	678.8	677.3	681.7	681.1	705.5	725.3	722.5	737.0	736.8	731.3	722.7	716.3
1987		704.8	708.5										

WOMEN EMPLOYEES—IN THOUSANDS

1983	96.5	87.7	88.8	90.4	93.1	95.6	98.2	98.2	100.1	101.6	101.8	101.5	100.8
1984	104.4	100.2	100.4	102.3	103.9	105.3	107.3	106.2	107.5	106.5	105.8	104.3	103.5
1985	106.0	102.1	102.1	103.1	104.1	105.4	108.5	107.7	109.3	109.2	107.4	107.0	106.0
1986	110.6	104.7	104.9	106.5	107.7	110.0	112.7	112.2	114.2	114.0	113.9	113.0	113.2
1987		112.2	113.4										

PRODUCTION WORKERS—IN THOUSANDS

1983	547.1	477.7	486.6	496.0	513.7	535.9	565.3	573.3	588.4	592.1	588.5	578.8	568.7
1984	589.5	558.1	563.1	573.5	581.7	592.8	612.3	610.5	613.5	608.2	599.4	584.9	575.8
1985	583.8	563.4	560.0	563.3	564.1	579.4	595.2	601.5	610.2	605.8	599.1	587.4	576.6
1986	597.1	569.0	567.4	571.6	579.1	593.2	611.2	608.2	622.2	621.2	615.4	606.7	599.9
1987		588.1	590.9										

PRODUCTION-WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

1983	312.78	300.66	299.92	303.36	308.43	312.76	320.28	314.77	319.87	321.12	319.93	310.06	312.02
1984	320.40	312.05	314.82	315.61	318.38	318.80	325.62	318.77	323.60	332.10	322.78	316.76	323.19
1985	327.98	316.29	311.00	318.35	318.37	326.41	337.01	326.33	335.34	338.20	335.32	327.46	335.67
1986	335.70	329.51	328.55	332.80	334.89	339.85	342.72	333.26	338.20	340.68	337.79	337.34	337.79
1987		331.63	337.39										

PRODUCTION-WORKER AVERAGE HOURLY EARNINGS—IN DOLLARS

1983	7.80	7.67	7.71	7.68	7.73	7.78	7.85	7.83	7.84	7.89	7.88	7.81	7.82
1984	8.03	7.90	7.91	7.91	7.92	7.95	8.06	8.07	8.09	8.20	8.11	8.06	8.10
1985	8.22	8.11	8.12	8.08	8.06	8.14	8.26	8.22	8.28	8.33	8.30	8.29	8.35
1986	8.33	8.30	8.36	8.32	8.31	8.35	8.40	8.29	8.33	8.35	8.32	8.35	8.32
1987		8.27	8.31										

PRODUCTION-WORKER AVERAGE WEEKLY HOURS

1983	40.1	39.2	38.9	39.5	39.9	40.2	40.8	40.2	40.8	40.7	40.6	39.7	39.9
1984	39.9	39.5	39.8	39.9	40.2	40.1	40.3	39.5	40.0	40.5	39.8	39.3	39.9
1985	39.9	39.0	38.3	39.4	39.5	40.1	40.8	39.7	40.5	40.6	40.4	39.5	40.2
1986	40.3	39.7	39.1	40.0	40.3	40.7	40.8	40.2	40.6	40.8	40.6	40.4	40.6
1987		40.7	40.6										

PRODUCTION-WORKER AVERAGE WEEKLY OVERTIME HOURS

1983	3.1	2.8	2.5	2.7	2.9	3.1	3.4	3.3	3.6	3.5	3.4	3.0	3.1
1984	3.2	2.9	3.1	3.2	3.3	3.2	3.3	3.2	3.4	3.4	3.1	2.9	3.2
1985	3.2	2.7	2.7	2.9	2.9	3.1	3.6	3.4	3.6	3.6	3.3	3.1	3.3
1986	3.5	2.9	2.9	3.2	3.3	3.6	3.8	3.6	3.9	3.9	3.7	3.6	3.6
1987		3.3	3.5										

SIC 241—LOGGING CAMPS AND LOGGING CONTRACTORS

ALL EMPLOYEES—IN THOUSANDS

1983	82.9	70.3	71.0	69.8	72.1	77.8	86.8	90.0	93.7	94.2	94.1	90.6	84.9
1984	87.5	81.4	81.5	79.8	78.5	83.8	92.1	94.6	95.8	96.0	93.2	88.7	84.8
1985	84.4	81.1	80.6	79.2	75.2	80.8	87.3	89.7	91.6	91.0	89.9	85.9	81.0
1986	82.9	79.3	78.1	75.6	73.7	77.3	84.3	85.6	89.9	91.9	89.9	87.0	82.3
1987		76.6	76.6										

See footnotes at end of tables.

SIC 241—LOGGING CAMPS AND LOGGING CONTRACTORS (Con.)

WOMEN EMPLOYEES—IN THOUSANDS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1983	6.1	5.5	5.6	5.4	5.5	5.8	6.2	6.4	6.6	6.7	6.7	6.5	6.2
1984	6.5	6.0	6.0	6.0	6.0	6.1	6.6	6.9	7.0	7.1	6.9	6.8	6.4
1985	6.4	6.1	6.2	6.3	6.1	6.5	6.9	6.7	6.5	6.5	6.4	6.3	6.2
1986	6.3	5.9	5.8	6.0	5.9	6.1	6.4	6.4	6.6	6.8	7.0	6.7	6.5
1987		6.0	6.1										

PRODUCTION WORKERS—IN THOUSANDS

1983	64.7	54.2	54.5	53.0	54.8	59.7	68.2	70.9	74.0	74.9	74.5	71.1	66.0
1984	68.2	63.1	63.3	61.5	60.0	64.5	72.4	74.9	75.7	75.6	73.3	68.5	65.6
1985	67.2	63.1	62.1	60.5	56.7	61.5	66.7	72.5	74.9	74.9	74.2	71.1	67.6
1986	69.9	66.5	65.5	63.3	61.0	65.0	71.2	72.4	76.8	78.5	76.4	73.5	69.1
1987		63.9	63.8										

PRODUCTION-WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

1983	399.68	395.41	381.85	386.49	398.27	398.40	408.00	405.81	418.41	421.61	422.62	378.30	372.42
1984	416.23	389.38	395.51	402.73	402.21	412.51	427.39	421.37	429.85	460.73	432.51	402.50	408.43
1985	425.88	405.97	389.46	400.98	414.74	422.18	443.07	418.11	437.30	450.36	454.69	419.98	439.22
1986	434.68	421.79	424.21	428.67	438.98	452.64	455.67	434.42	428.65	432.42	442.80	427.39	421.34
1987		417.12	433.54										

PRODUCTION-WORKER AVERAGE HOURLY EARNINGS—IN DOLLARS

1983	10.17	9.96	9.97	9.91	10.16	10.01	10.20	10.12	10.23	10.41	10.44	10.28	10.12
1984	10.70	10.22	10.22	10.30	10.42	10.55	10.82	10.86	10.91	11.21	11.09	10.82	10.72
1985	10.92	10.74	10.67	10.58	10.58	10.77	10.94	10.86	10.96	11.12	11.09	11.14	11.32
1986	10.84	10.76	10.99	10.88	10.92	11.04	11.06	10.70	10.77	10.73	10.80	10.82	10.64
1987		10.56	10.60										

PRODUCTION-WORKER AVERAGE WEEKLY HOURS

1983	39.3	39.7	38.3	39.0	39.2	39.8	40.0	40.1	40.9	40.5	40.5	36.8	36.8
1984	38.9	38.1	38.7	39.1	38.6	39.1	39.5	38.8	39.4	41.1	39.0	37.2	38.1
1985	39.0	37.8	36.5	37.9	39.2	39.2	40.5	38.5	39.9	40.5	41.0	37.7	38.8
1986	40.1	39.2	38.6	39.4	40.2	41.0	41.2	40.6	39.8	40.3	41.0	39.5	39.6
1987		39.5	40.9										

PRODUCTION-WORKER AVERAGE WEEKLY OVERTIME HOURS

1983	3.3	3.4	2.9	2.9	3.3	3.4	3.5	3.5	3.6	3.9	3.7	2.5	2.5
1984	3.4	2.6	3.1	3.0	3.4	3.3	3.4	3.5	3.6	4.1	3.5	3.3	3.5
1985	3.3	2.9	3.2	3.3	3.1	2.9	3.4	2.9	3.7	3.6	3.9	3.2	2.7
1986	3.6	2.6	2.7	3.3	3.7	3.9	4.1	3.7	4.1	3.8	4.3	3.6	3.4
1987		3.5	3.9										

SIC 242—SAWMILLS AND PLANING MILLS

ALL EMPLOYEES—IN THOUSANDS

1983	192.5	172.5	176.0	179.0	183.4	190.4	198.9	200.9	204.0	204.0	202.0	200.7	198.0
1984	202.4	196.3	198.3	200.3	202.8	204.3	208.8	206.9	207.5	205.0	202.5	198.7	197.5
1985	194.7	193.2	191.7	192.6	191.2	196.6	199.3	198.5	199.6	197.5	194.9	191.8	189.9
1986	193.8	188.4	186.4	188.0	191.3	193.6	196.7	192.4	198.6	198.6	198.3	196.6	196.3
1987		194.1	195.0										

WOMEN EMPLOYEES—IN THOUSANDS

1983	17.7	16.6	16.5	16.7	17.0	17.5	17.9	18.1	18.3	18.5	18.4	18.3	18.2
1984	18.7	18.1	18.2	18.5	18.6	18.9	19.3	18.9	19.2	19.0	18.4	18.4	18.6
1985	18.3	18.4	18.1	18.1	18.0	18.4	18.7	18.5	18.6	18.4	18.1	17.9	17.9
1986	18.3	17.8	17.6	17.7	18.3	18.3	18.4	18.0	18.5	18.6	18.6	18.6	18.8
1987		18.6	18.7										

Produce Price Index

Lumber and wood products

BASE 1967 = 100

YR	ANN AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1926	26.5	27.2	27.1	27.0	26.7	26.5	26.3	26.2	26.1	26.1	26.0	26.4	26.2
1927	25.0	25.7	25.5	25.3	25.4	25.4	25.3	25.1	24.8	24.5	24.5	24.1	23.8
1928	24.1	23.9	24.0	24.0	23.6	23.6	23.7	24.0	24.2	24.4	24.5	24.8	25.0
1929	25.0	24.9	25.2	25.6	25.3	25.0	25.0	24.9	25.0	25.2	25.4	24.5	24.5
1930	22.9	24.6	24.4	24.4	24.4	23.9	23.0	22.3	21.8	21.8	21.3	21.3	20.9
1931	18.6	20.4	19.7	19.9	19.5	18.7	18.4	18.1	18.0	18.0	17.5	17.6	17.6
1932	16.0	17.7	17.1	16.8	16.4	16.2	15.7	15.6	15.2	15.4	15.4	15.4	15.3
1933	19.0	15.2	15.3	15.7	15.7	16.1	18.1	20.2	21.1	21.8	22.4	23.0	23.2
1934	22.3	23.1	23.1	22.9	23.1	22.8	22.9	22.3	21.5	21.7	21.6	21.4	21.3
1935	21.4	21.1	21.3	21.2	21.2	21.1	21.4	21.5	21.8	21.8	21.8	21.9	21.7
1936	22.4	21.8	21.9	22.0	22.1	22.1	21.9	22.3	22.3	22.7	22.9	23.1	23.8
1937	26.5	24.7	26.3	27.0	27.2	27.7	27.5	27.1	26.7	26.5	26.1	25.4	25.2
1938	24.1	24.8	24.4	24.5	24.4	23.5	23.6	23.6	24.0	24.1	24.0	24.0	24.1
1939	24.8	24.4	24.6	24.5	24.3	24.2	24.1	24.4	24.4	24.9	25.9	26.1	25.9
1940	27.4	25.9	25.9	25.9	25.5	25.6	25.6	25.7	26.6	28.7	30.5	31.4	31.7
1941	32.7	31.6	31.3	31.2	31.3	31.3	31.4	32.6	34.0	34.3	34.7	34.5	34.7
1942	35.6	35.3	35.5	35.6	35.3	35.2	35.3	35.6	35.6	35.7	35.7	35.9	36.1
1943	37.7	36.1	36.4	36.5	36.5	36.8	37.0	37.2	38.4	38.9	39.1	39.4	39.4
1944	40.6	39.4	39.6	40.1	40.8	41.0	41.0	41.1	41.1	41.0	40.9	40.9	40.9
1945	41.2	40.9	41.0	40.9	41.0	41.1	41.1	41.2	41.2	41.2	41.2	41.2	41.7
1946	47.2	41.9	42.3	44.2	45.2	45.9	46.7	47.1	47.1	47.3	47.7	51.0	59.6
1947	73.4	66.5	68.1	70.4	72.2	72.7	72.3	72.7	74.0	75.8	77.0	78.9	80.2
1948	84.0	81.8	82.3	83.0	83.3	84.3	84.8	85.4	86.1	85.6	84.7	83.9	82.6
1949	77.7	81.6	80.7	80.0	79.1	78.1	76.8	75.8	74.9	75.1	76.0	76.8	77.7
1950	89.3	78.9	80.7	82.2	83.5	86.2	88.0	90.4	94.2	97.6	96.7	96.1	96.5
1951	97.2	98.5	99.2	99.4	99.3	99.0	97.8	97.0	96.0	95.4	95.5	95.1	94.4
1952	94.4	94.2	94.4	94.6	94.9	94.8	94.2	94.4	94.6	94.5	94.3	93.9	93.9
1953	94.3	94.6	95.1	95.5	95.9	95.6	95.4	95.1	94.5	93.5	92.7	92.0	92.1
1954	92.6	91.8	91.7	91.6	91.2	91.1	91.3	93.5	93.5	93.7	94.0	94.1	94.2
1955	97.1	94.5	95.2	95.4	96.1	97.0	97.2	97.4	98.3	98.7	98.5	98.2	98.3
1956	98.5	99.2	99.5	100.6	100.9	100.6	100.0	99.4	98.3	97.1	95.8	95.4	95.1
1957	93.5	95.3	94.8	94.3	94.4	94.0	94.0	93.7	93.2	92.4	92.1	91.8	91.4
1958	92.4	91.4	90.9	90.6	90.9	91.0	91.4	91.7	93.2	94.5	94.9	94.2	94.0
1959	98.8	94.6	96.2	97.4	99.2	100.6	101.2	100.7	100.9	99.8	99.1	97.6	98.0
1960	95.3	98.2	98.0	97.8	97.3	96.1	95.4	93.8	93.3	92.4	91.7	91.6	
1961	91.0	90.7	89.9	90.5	92.5	92.2	92.4	91.9	91.0	90.7	89.9	89.9	89.8
1962	91.6	89.8	90.3	91.3	91.8	92.1	92.3	92.5	92.4	92.0	91.7	91.4	90.9
1963	93.5	91.0	91.2	91.6	92.0	92.5	93.3	96.4	97.3	94.8	94.1	94.1	94.0
1964	95.4	93.9	94.8	95.8	96.6	96.6	96.2	96.0	95.7	95.4	95.2	94.5	94.3
1965	95.9	95.6	95.6	95.5	95.4	95.3	95.2	95.4	96.6	96.8	96.4	96.4	96.7
1966	100.2	97.5	98.4	100.2	102.8	104.0	102.2	101.1	100.8	100.5	99.4	97.7	97.2
1967	100.0	97.3	98.4	98.3	98.8	98.9	99.4	99.9	100.9	103.1	101.7	101.0	102.1
1968	113.3	103.1	106.0	108.2	110.0	111.0	111.2	113.1	114.3	116.4	118.6	120.3	126.7
1969	125.3	130.8	137.2	141.9	136.0	130.7	123.2	119.0	117.6	117.0	116.4	117.6	116.2
1970	113.6	115.3	114.0	113.1	113.9	114.8	113.9	113.5	114.1	114.1	113.1	111.9	111.0
1971	127.3	112.2	117.4	123.5	125.0	125.2	126.5	131.1	135.1	134.7	132.0	131.6	133.1
1972	144.3	134.9	137.7	139.5	141.1	142.7	144.2	146.1	148.1	148.5	149.2	149.4	149.8
1973	177.2	151.0	161.0	173.2	182.0	186.9	183.1	177.8	178.8	181.9	180.3	184.7	186.1
1974	185.6	183.7	184.1	191.3	200.2	198.0	192.2	188.6	183.7	180.4	169.4	165.8	165.4

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... X Lumber and wood products

BASE 1967 = 100

YR	ANN AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1975	176.9	164.7	169.3	169.6	174.9	183.0	181.0	179.6	179.7	179.9	179.1	178.3	183.1
1976	205.6	190.7	196.3	202.5	203.3	202.4	199.9	203.7	207.5	212.8	213.6	214.3	220.0
1977	236.3	222.8	224.4	229.0	229.8	229.5	228.8	235.6	242.7	252.9	247.8	243.3	249.2
1978	276.0	256.4	263.7	266.2	269.6	273.4	278.5	277.5	281.6	282.8	284.2	290.0	288.6
1979	300.4	290.2	293.9	300.5	304.9	302.8	299.8	300.1	304.7	309.7	308.8	298.9	290.1
1980	288.9	290.0	294.7	294.9	275.6	272.1	279.8	289.2	296.1	292.2	289.0	293.4	299.4
1981	292.8	296.5	294.7	294.4	299.4	298.4	298.1	296.5	294.5	289.3	284.3	282.1	285.4
1982	284.7	285.5	285.2	285.3	286.5	284.6	289.0	288.6	284.2	283.0	279.4	279.9	285.6
1983	307.1	293.3	303.1	305.8	307.2	308.0	314.8	314.6	313.9	305.6	305.6	304.9	308.7
1984	307.4	309.1	315.7	316.8	315.1	308.5	307.1	304.4	304.7	303.3	300.3	301.0	303.0
1985	303.6	304.4	303.4	303.1	301.5	306.8	313.1	310.1	305.5	300.5	299.4	296.9	298.1
1986	305.3	298.9	297.1	301.2	308.6	308.1	306.0	306.8	307.2	308.8	307.1	307.5	306.8
1987	NA	307.9	311.6	314.8	315.2	315.2	317.2	320.4	321.7	331.1	330.2	NA	NA

NA NOT AVAILABLE

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SIC 2396—AUTOMOTIVE AND APPAREL TRIMMINGS (Con.)

ALL EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1979	34.6	36.9	35.9	36.4	36.9	36.7	34.2	33.2	31.3	34.5	35.7	31.1	32.5
1980	28.9	29.1	29.7	31.4	28.9	27.3	27.7	23.6	28.2	29.8	30.3	30.7	30.4
1981	31.2	29.5	29.9	31.9	31.9	33.8	34.3	28.0	30.1	33.0	32.8	31.0	27.8
1982	29.0	26.9	27.5	28.9	28.2	30.1	30.6	29.7	29.7	31.2	29.2	28.1	28.3
1983	31.2	28.1	29.0	29.6	30.5	31.0	31.9	30.1	31.1	32.8	33.2	33.6	33.3
1984		32.7	32.8	33.5	33.4	33.5	33.4	32.8					

WOMEN EMPLOYEES—IN THOUSANDS

1972	14.6	14.3	14.3	14.7	14.8	14.6	14.0	12.2	14.6	15.4	15.6	15.6	14.8
1973	14.8	14.2	14.2	14.3	14.5	14.6	14.4	13.7	15.2	16.4	16.3	16.5	12.8
1974	13.1	13.1	12.3	10.4	12.4	13.0	12.8	11.6	14.0	15.7	14.8	14.6	13.1
1975	13.2	10.8	10.9	11.4	12.1	12.5	13.0	12.3	13.6	14.8	15.5	15.7	15.9
1976	15.4	13.8	14.3	15.1	15.6	15.7	15.4	13.6	15.1	16.3	16.4	16.6	16.6
1977	17.1	16.0	14.8	16.3	16.6	17.7	17.5	15.5	16.5	18.4	19.1	18.5	18.6
1978	18.4	17.5	17.8	18.1	18.2	18.2	18.1	16.1	17.8	19.4	19.8	20.0	20.0
1979	17.5	19.1	18.4	18.6	18.9	18.6	17.1	16.4	15.2	17.6	18.3	15.8	16.4
1980	14.5	14.7	15.0	15.8	14.2	13.9	14.0	11.7	14.0	14.6	15.0	15.1	15.4
1981	15.8	15.0	14.9	16.0	16.1	17.1	17.4	13.8	15.1	16.6	17.1	15.8	14.4
1982	14.7	14.0	14.0	14.6	14.5	15.3	15.7	14.9	15.1	15.8	14.9	14.0	14.1
1983	17.3	15.7	15.8	16.3	16.7	17.1	17.7	16.7	17.3	18.4	18.8	18.7	18.3
1984		18.0	18.2	18.3	18.1	18.2	18.1	17.5					

PRODUCTION WORKERS—IN THOUSANDS

1972	26.2	25.2	25.3	25.8	26.1	26.3	24.9	22.4	26.7	28.1	28.1	28.2	27.0
1973	26.8	26.2	25.9	25.9	26.5	26.6	26.4	25.0	27.7	29.3	29.7	29.9	23.0
1974	23.8	24.3	21.8	10.0	22.1	23.6	23.5	21.4	25.4	27.8	26.3	26.2	23.6
1975	23.2	18.8	18.9	19.9	21.3	22.3	23.2	22.3	23.9	26.1	26.9	26.9	27.8
1976	26.4	24.1	24.9	26.1	26.6	26.7	26.2	23.7	26.0	27.8	27.7	28.3	28.4
1977	28.4	27.4	24.9	27.4	27.8	29.7	29.6	25.9	26.5	29.8	26.6	30.2	30.9
1978	30.0	29.2	27.9	29.7	30.3	30.2	30.2	26.2	29.2	31.4	31.8	31.9	32.2
1979	28.7	30.9	29.8	30.3	30.9	30.7	28.3	27.4	25.4	28.5	29.9	25.4	26.8
1980	23.9	23.5	24.1	25.8	22.7	21.1	22.0	18.0	24.5	26.3	26.6	26.6	25.9
1981	26.0	24.6	25.6	27.6	27.1	28.1	29.4	22.8	24.0	27.5	27.3	25.1	21.9
1982	23.1	21.0	21.0	23.1	22.5	24.3	24.9	23.5	23.5	25.8	22.9	22.5	22.7
1983	25.7	22.9	23.8	24.2	25.2	25.7	26.4	24.7	25.6	27.3	27.5	27.9	27.6
1984		27.2	27.8	27.7	27.6	27.7	27.5	26.9					

PRODUCTION-WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

1972	191.68	178.77	172.16	170.33	181.89	183.51	174.44	190.94	205.24	198.50	211.36	212.87	219.83
1973	205.00	183.76	187.69	188.42	198.29	202.94	208.16	206.34	225.11	225.13	208.16	196.40	205.87
1974	215.82	181.30	184.88	183.38	178.71	200.50	216.11	213.70	239.84	244.02	260.40	223.10	238.05
1975	233.24	210.16	196.62	213.93	216.02	215.25	226.00	226.78	236.99	258.94	245.20	243.97	271.76
1976	261.23	252.57	251.30	250.53	250.88	280.11	276.22	250.98	261.94	256.71	258.33	264.50	271.08
1977	275.93	263.45	247.38	265.86	268.13	271.35	292.32	264.31	253.49	275.81	272.80	274.03	341.42
1978	297.64	272.88	243.24	288.35	300.85	292.47	288.45	292.13	292.13	311.88	316.92	314.99	349.08
1979	300.31	301.98	291.41	313.16	278.53	315.20	303.31	308.83	278.63	291.78	305.74	279.31	340.17
1980	314.26	281.22	278.55	293.04	270.11	261.93	293.96	280.80	324.97	346.33	358.90	347.92	394.83
1981	388.57	356.17	337.13	384.74	392.92	405.98	417.80	402.21	398.67	393.12	403.22	393.57	390.53
1982	417.64	370.13	399.90	395.26	421.85	433.49	443.47	425.06	436.65	405.73	408.75	423.80	431.47
1983	425.98	433.92	452.47	435.34	443.98	439.43	447.10	396.31	402.35	418.32	416.22	412.53	423.33
1984		424.77	469.50	360.86	411.68	418.82	430.68	384.20					

DEPARTMENT OF LABOR
Bureau of Labor Statistics

SIC 2396—AUTOMOTIVE AND APPAREL TRIMMINGS (Con.)

PRODUCTION-WORKER AVERAGE HOURLY EARNINGS—IN DOLLARS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1972	4.63	4.39	4.37	4.39	4.48	4.52	4.45	4.59	4.74	4.75	4.87	4.86	4.94
1973	4.93	4.82	4.81	4.77	4.86	4.89	4.98	4.96	5.07	5.14	4.98	4.91	4.89
1974	5.45	4.90	4.93	4.89	5.02	5.21	5.43	5.41	5.63	5.88	6.00	5.75	5.75
1975	5.95	5.68	5.63	5.72	5.73	5.74	5.87	5.86	5.91	6.18	6.13	6.13	6.32
1976	6.45	6.33	6.33	6.33	6.40	6.56	6.53	6.37	6.42	6.45	6.54	6.42	6.71
1977	6.83	6.79	6.72	6.68	6.67	6.75	6.96	6.81	6.45	6.76	6.82	6.92	7.28
1978	7.43	7.20	6.93	7.30	7.41	7.33	7.46	7.34	7.34	7.57	7.60	7.59	7.88
1979	7.74	7.72	7.53	7.79	7.61	7.88	7.94	7.98	7.45	7.52	7.76	7.59	8.08
1980	8.27	7.58	7.59	7.92	7.32	7.06	7.86	7.37	8.62	9.09	9.25	9.18	9.29
1981	9.74	8.86	8.99	9.43	9.56	9.83	10.00	9.81	9.70	10.08	10.26	10.04	10.25
1982	10.52	10.31	10.36	10.24	17.52	10.73	10.79	10.60	10.65	10.43	10.27	10.49	10.68
1983	10.39	10.93	11.09	10.67	10.75	10.64	10.62	10.11	9.91	10.08	9.91	9.95	10.25
1984		10.31	9.85	9.80	9.92	10.02	10.23	9.98					

PRODUCTION-WORKER AVERAGE WEEKLY HOURS

1972	41.4	38.9	39.4	38.8	40.6	40.6	39.2	41.6	43.3	42.0	43.4	43.8	44.5
1973	41.6	40.2	41.1	39.5	40.8	41.5	42.0	41.6	44.4	43.8	41.8	40.8	42.1
1974	35.6	37.0	37.5	37.5	35.6	38.5	39.8	39.5	42.6	41.5	43.4	38.8	41.4
1975	39.1	37.0	36.7	37.4	37.7	37.5	38.5	38.7	40.1	41.9	40.0	39.8	43.0
1976	40.9	39.9	39.7	41.0	39.2	42.7	42.3	39.4	40.8	39.8	39.5	41.2	40.4
1977	40.8	38.8	36.8	39.8	40.2	40.2	42.0	39.4	39.3	40.8	40.0	39.6	46.2
1978	40.1	37.9	35.1	39.5	40.6	39.9	38.8	39.8	39.8	41.2	41.7	41.5	44.3
1979	38.8	39.0	38.7	40.2	36.6	40.0	38.2	38.7	37.4	38.8	39.4	36.8	42.1
1980	38.0	37.1	36.7	37.0	36.9	37.1	37.4	38.1	37.7	38.1	38.8	37.9	42.5
1981	40.1	40.2	37.5	40.8	41.1	41.3	41.7	41.0	41.1	39.0	39.3	39.2	38.1
1982	39.7	35.9	38.6	38.6	40.1	40.4	41.1	40.1	41.0	38.9	39.8	40.4	40.4
1983	41.0	39.7	40.8	40.8	41.3	41.3	42.1	39.2	40.6	41.5	42.0	41.5	41.3
1984		41.2	40.7	40.7	41.5	40.9	42.1	39.9					

PRODUCTION-WORKER AVERAGE WEEKLY OVERTIME HOURS

1972	4.1	1.5	1.6	1.8	3.1	3.4	2.8	4.9	6.2	4.9	6.4	6.7	5.1
1973	4.4	3.4	3.6	2.3	3.5	4.2	4.6	4.6	7.1	6.9	5.0	4.1	3.3
1974	4.2	2.6	3.1	3.1	2.4	3.3	4.3	4.4	6.3	7.1	7.1	3.2	1.7
1975	2.1	.8	.9	1.2	.8	1.0	2.0	2.5	3.0	4.1	2.9	2.4	2.4
1976	4.0	3.5	2.3	4.0	1.9	5.4	5.2	3.7	4.5	5.1	5.7	3.3	3.0
1977	3.5	4.4	1.2	2.9	3.3	3.2	5.1	3.9	2.6	4.4	3.3	2.9	4.3
1978	3.7	3.4	1.5	3.2	4.0	3.5	3.3	3.6	3.2	5.3	5.1	4.6	3.7
1979	2.2	3.3	2.4	3.6	1.5	3.6	2.5	2.8	1.5	1.5	1.8	.6	.6
1980	1.8	.3	.4	1.4	1.1	.8	.9	1.2	2.8	3.2	2.7	2.4	3.3
1981	2.0	1.0	.8	2.2	2.3	2.9	2.8	3.2	2.8	2.2	2.0	.8	.7
1982	2.4	.6	1.5	1.4	2.8	3.5	4.2	2.5	3.6	2.1	2.0	2.4	2.2
1983	3.5	2.0	3.4	2.9	3.5	3.6	4.2	2.7	3.4	4.2	4.4	3.9	3.9
1984		4.1	2.9	3.2	4.2	3.8	4.8	2.6					

SIC 26—PAPER AND ALLIED PRODUCTS

ALL EMPLOYEES—IN THOUSANDS

1939	320	305	306	311	309	310	310	312	319	328	344	344	339
1940	333	330	326	325	324	331	333	334	336	338	339	342	343
1941	372	338	343	350	357	364	373	380	387	392	394	395	396
1942	376	390	389	389	388	382	375	365	361	361	365	370	376
1943	389	378	383	384	385	387	393	394	395	389	392	396	396
1944	368	395	394	383	389	387	387	389	387	381	383	386	390

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SIC 26—PAPER AND ALLIED PRODUCTS (Con.)

ALL EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1945	391	388	390	389	385	384	389	386	386	387	397	402	412
1946	447	420	427	433	440	444	449	446	452	454	459	466	468
1947	465	468	469	469	467	462	462	454	461	461	465	468	472
1948	473	471	469	470	466	465	468	466	474	478	481	482	480
1949	455	469	462	458	448	444	441	437	443	456	465	467	464
1950	485	461	464	467	469	471	480	478	493	507	506	515	515
1951	511.2	513.0	513.1	513.9	517.2	515.2	517.4	510.6	511.7	508.0	506.4	504.7	502.9
1952	503.7	500.5	499.5	496.5	493.3	493.8	500.2	492.6	505.4	506.1	514.2	518.3	523.7
1953	530.4	519.1	520.2	524.0	524.5	525.5	532.9	530.4	538.7	541.1	539.3	536.8	532.8
1954	531.1	528.0	527.8	527.9	525.9	526.3	529.8	524.5	532.6	537.5	537.2	538.7	537.3
1955	550.0	533.3	533.3	536.2	538.4	541.8	549.3	548.8	558.8	562.3	565.2	566.6	565.4
1956	567.8	559.7	557.4	560.4	564.1	565.3	570.4	566.6	574.5	574.8	573.1	572.4	574.8
1957	570.6	569.9	566.8	567.7	568.1	566.6	572.6	563.9	570.6	575.4	575.5	575.6	574.1
1958	564.1	565.9	559.2	557.0	555.9	554.4	558.2	554.2	560.4	574.1	573.8	574.7	573.2
1959	587.2	573.0	572.4	573.4	577.2	580.0	591.4	587.9	594.3	601.3	598.0	597.6	598.7
1960	601.1	595.2	594.8	595.7	599.0	600.1	606.1	599.6	607.3	609.2	606.7	603.3	596.3
1961	601.3	592.3	589.1	591.7	592.6	595.7	605.7	600.9	608.1	609.4	609.0	610.4	611.1
1962	614.4	603.3	602.3	606.0	610.9	611.4	619.7	615.1	623.0	623.4	621.0	618.6	618.2
1963	618.5	613.0	609.8	612.9	613.6	614.4	622.5	618.2	626.4	625.6	622.7	622.1	621.1
1964	625.5	615.2	613.8	615.6	619.2	620.5	630.2	625.9	633.0	634.7	633.0	633.6	631.0
1965	639.1	625.9	625.6	627.4	630.2	630.4	640.8	642.4	646.0	648.6	648.7	650.5	652.9
1966	666.9	649.4	650.8	653.1	656.6	658.0	675.5	674.5	679.7	672.7	674.7	679.1	678.3
1967	679.1	671.7	671.3	673.4	671.6	670.1	688.6	684.3	688.8	683.2	679.1	681.6	684.9
1968	691.2	678.1	677.7	677.8	680.4	682.5	698.0	693.4	702.0	698.1	698.0	703.4	705.2
1969	711.1	700.2	702.7	703.1	699.0	703.1	720.0	714.6	721.3	716.3	714.3	718.2	720.2
1970	705.5	713.1	710.8	711.2	710.3	703.0	715.7	705.1	707.3	703.2	692.7	697.1	695.3
1971	681.9	686.4	32.3	679.7	678.9	670.6	684.7	672.1	671.7	689.7	684.7	685.9	685.5
1972	688.9	673.7	673.6	676.1	676.9	683.8	698.2	691.0	697.2	694.8	696.7	700.4	702.0
1973	704.6	694.0	694.9	698.6	698.5	701.0	711.3	702.4	711.6	707.0	709.3	714.1	713.1
1974	706.1	709.7	706.8	708.5	708.0	708.1	720.3	712.2	714.3	711.0	702.1	692.9	679.0
1975	642.0	659.3	640.2	629.3	627.8	623.5	633.6	632.1	644.6	648.1	653.9	656.5	659.5
1976	675.5	658.3	660.5	664.0	667.2	673.7	686.2	679.1	684.6	684.0	681.6	684.7	681.6
1977	691.6	678.1	677.9	680.3	686.2	692.1	702.6	694.9	701.7	698.4	695.8	694.4	696.5
1978	698.7	690.8	690.4	694.3	697.7	703.1	714.1	707.2	700.9	698.5	690.9	687.9	698.6
1979	706.8	694.1	697.2	701.8	703.8	705.6	716.8	712.0	715.8	710.4	709.9	708.0	706.1
1980	692.8	703.8	701.8	702.2	698.5	691.9	694.4	681.0	687.4	686.5	680.5	680.9	680.8
1981	680.5	684.4	684.4	684.8	686.9	689.2	697.1	692.8	696.4	698.0	687.7	682.8	677.9
1982	662.4	671.3	666.6	667.4	664.9	662.9	666.8	661.1	660.8	662.5	655.0	656.3	653.0
1983	[illegible]												
1984	[illegible]												

WOMEN EMPLOYEES—IN THOUSANDS

1950		112.9			112.6			113.3			125.5		
1951		126.7			127.2			123.6			122.0		
1952		119.1			116.4			116.7			127.5		
1953		127.7			129.0			130.5			134.3		
1954		129.9			125.2			122.2			127.3		
1955		124.3			124.9			127.9			135.1		
1956		129.3			130.9			129.8			134.1		
1957		129.9			127.8			125.7			131.2		
1958		123.8			121.9			120.8			127.0		
1959	128.1	123.8	124.2	124.6	125.4	126.7	127.9	127.0	130.0	131.8	132.1	132.1	131.1

See footnotes at end of tables.

SIC 26—PAPER AND ALLIED PRODUCTS (Con.)

WOMEN EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1960	130.4	128.1	128.3	128.7	130.0	130.5	131.6	129.8	131.7	132.7	133.0	131.8	128.9
1961	129.1	127.3	126.4	126.6	126.6	127.0	129.0	127.9	131.0	131.5	132.0	132.3	132.1
1962	130.8	128.6	127.9	128.9	130.5	130.6	131.9	130.7	132.2	133.2	132.7	131.2	130.6
1963	130.0	128.5	127.6	128.7	128.8	129.2	130.2	128.9	131.5	132.7	131.9	131.4	130.6
1964	130.5	128.3	126.9	128.0	129.5	129.7	130.3	129.0	132.0	133.5	133.5	133.3	132.3
1965	132.9	129.0	128.6	129.5	130.1	131.3	131.8	131.5	135.1	136.1	136.6	137.4	137.5
1966	141.0	134.9	135.3	136.3	138.7	139.1	142.0	139.6	143.0	144.2	146.2	147.0	145.1
1967	145.3	142.3	141.7	143.7	143.7	144.1	146.9	143.5	146.8	147.4	147.7	147.6	148.0
1968	148.6	144.8	144.8	145.7	145.9	147.0	149.6	147.4	150.4	151.5	152.6	152.2	151.7
1969	152.0	148.9	149.7	150.2	150.3	150.1	152.6	150.7	153.6	153.7	154.2	155.1	154.8
1970	149.6	152.0	151.5	151.9	151.3	149.4	151.4	147.5	149.3	149.1	147.5	148.1	148.3
1971	141.1	142.5	141.6	140.7	141.2	140.7	142.5	137.2	140.4	142.6	141.9	141.1	140.8
1972	140.8	136.4	136.0	137.5	137.5	139.1	142.7	140.0	142.7	143.3	144.5	145.3	145.1
1973	146.4	142.8	143.0	144.5	145.1	146.6	147.7	143.6	147.4	147.9	149.9	150.7	147.7
1974	146.8	146.4	146.4	147.0	147.1	147.7	149.7	146.6	148.2	149.0	147.7	144.5	141.0
1975	132.3	134.6	131.1	128.9	127.1	127.4	129.9	129.0	132.7	135.2	136.6	137.6	137.8
1976	143.9	137.4	138.0	139.8	141.0	142.7	147.2	144.7	147.0	147.4	147.2	148.0	146.6
1977	151.1	144.2	145.3	146.3	148.1	150.4	154.4	151.5	154.3	154.4	155.1	156.1	154.5
1978	157.9	152.7	153.2	154.3	156.6	159.3	161.7	158.6	160.0	159.7	159.1	160.2	159.2
1979	161.6	158.0	157.4	159.3	160.6	160.8	165.3	162.6	164.5	163.9	164.2	162.8	160.8
1980	159.2	160.2	159.7	160.8	161.0	159.5	159.7	156.0	158.2	157.9	159.2	159.0	158.0
1981	160.3	157.2	157.4	158.7	159.8	161.0	162.5	162.0	164.2	164.1	160.7	158.7	157.3
1982	152.7	155.1	154.5	154.5	154.0	153.9	153.7	152.0	152.6	152.2	151.0	150.0	149.4
1983	153.0	147.5	147.5	149.1	150.9	152.5	154.3	153.1	155.7	156.4	156.5	156.1	156.1
1984		154.8	155.7	156.2	157.7	159.4	163.4	162.5					

PRODUCTION WORKERS—IN THOUSANDS

1929	235												
1930	224												
1931	195												
1932	177												
1933	194												
1934	223												
1935	231												
1936	241												
1937	262												
1938	245												
1939	266	252	254	258	256	257	257	259	265	274	290	289	285
1940	279	275	272	271	270	277	278	279	280	283	294	287	287
1941	318	284	288	296	302	310	317	324	332	338	340	341	343
1942	327	337	336	337	336	332	325	315	313	314	319	325	331
1943	346	334	338	338	341	344	349	350	352	347	350	353	353
1944	345	351	351	349	345	344	343	345	343	338	339	342	346
1945	345	344	347	345	340	339	341	339	340	339	340	353	353
1946	393	370	376	381	387	389	395	392	398	400	404	411	412
1947	407	411	412	412	408	404	403	395	402	403	407	408	412
1948	408	408	407	408	403	401	404	402	408	413	415	416	414
1949	399	404	397	392	383	379	376	372	379	392	400	402	399
1950	416	394	396	399	402	403	412	409	423	431	435	441	443
1951	435.1	436.1	438.2	438.4	441.7	440.5	441.3	434.0	434.9	431.0	428.9	427.0	426.0
1952	421.9	420.9	419.6	416.1	412.4	413.3	416.2	410.3	423.5	424.1	430.9	433.8	438.9
1953	442.9	434.0	434.9	437.5	438.0	438.3	443.9	440.8	449.3	452.4	450.9	448.8	445.4

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SIC 2392—HOUSE FURNISHINGS, NEC (Con.)

PRODUCTION-WORKER AVERAGE WEEKLY HOURS

Year	Annual avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	39.2	38.0	37.6	37.6	38.9	39.0	38.0	37.8	39.4	40.4	41.2	40.5	40.2
1984	38.5	37.6	38.6	38.3	38.9	37.9	37.9	37.1	38.6	39.0	39.6	39.2	38.7
1985	38.2	38.5	38.1	37.7	37.1	37.7	37.6	37.1	38.6	39.6	40.1	39.6	39.9
1986	38.6	37.7	37.6	37.5	37.4	37.7	38.2	38.0	39.6	39.5	40.2	40.2	39.9
1987		37.8	38.5										

PRODUCTION-WORKER AVERAGE WEEKLY OVERTIME HOURS

Year	Annual avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	2.5	1.8	1.7	1.7	2.0	2.1	2.0	1.8	2.7	3.4	4.0	2.7	2.5
1984	2.3	1.6	2.0	2.3	2.6	2.1	2.0	1.6	2.3	2.8	3.1	2.2	2.2
1985	2.2	1.3	1.7	1.8	2.0	1.4	1.7	1.5	2.4	2.9	3.5	3.0	3.4
1986	2.5	2.0	1.8	1.9	1.7	1.9	2.1	2.1	3.1	3.4	3.5	3.4	2.8
1987		2.0	2.3										

SIC 2396—AUTOMOTIVE AND APPAREL TRIMMINGS

ALL EMPLOYEES—IN THOUSANDS

Year	Annual avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	32.4	28.1	29.0	29.6	30.8	31.7	32.8	31.3	32.7	34.9	35.5	36.3	35.2
1984	37.3	36.0	36.5	37.5	37.5	37.9	37.9	37.3	36.4	37.7	37.3	37.4	38.3
1985	38.3	38.3	38.3	38.5	38.4	38.5	38.7	37.1	37.8	38.9	39.2	38.1	38.4
1986	39.1	38.1	38.0	38.8	38.5	38.4	38.9	38.5	38.1	40.6	40.5	41.5	40.4
1987		40.6	40.7										

WOMEN EMPLOYEES—IN THOUSANDS

Year	Annual avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	18.0	15.7	15.8	16.3	16.9	17.4	18.3	17.4	18.1	19.5	20.1	20.1	20.0
1984	19.9	19.6	20.1	20.4	20.2	20.5	20.4	19.9	19.0	19.8	19.5	19.6	20.1
1985	20.1	20.2	20.2	20.0	20.2	20.2	20.1	19.4	20.0	20.7	20.8	19.8	20.0
1986	20.4	19.9	19.9	20.0	20.2	20.0	20.3	19.0	20.4	21.4	21.3	21.6	20.9
1987		20.9	21.0										

PRODUCTION WORKERS—IN THOUSANDS

Year	Annual avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	26.7	22.9	23.8	24.2	25.4	26.2	27.2	25.7	27.0	28.9	29.4	30.0	30.0
1984	30.8	29.9	30.1	31.0	31.0	31.1	31.2	30.6	29.8	31.1	30.7	31.0	31.3
1985	31.8	31.8	31.7	31.9	31.9	32.0	31.6	30.6	31.4	32.4	32.5	31.6	32.0
1986	32.8	31.7	31.6	32.5	32.3	32.3	32.8	30.3	32.3	34.3	34.3	35.2	34.0
1987		34.2	34.4										

PRODUCTION-WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

Year	Annual avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	429.56	433.92	452.47	435.34	444.80	441.56	449.63	400.07	405.59	422.47	422.26	419.33	430.36
1984	428.28	432.00	408.00	406.78	419.33	418.40	436.65	404.40	435.74	429.74	437.42	425.14	467.67
1985	442.86	467.08	425.26	430.64	429.27	413.36	437.93	424.85	435.96	459.58	457.29	454.28	479.64
1986	470.20	475.90	455.33	471.50	467.31	470.09	474.66	429.66	464.22	487.52	460.50	478.92	453.91
1987		486.64	485.41										

PRODUCTION-WORKER AVERAGE HOURLY EARNINGS—IN DOLLARS

Year	Annual avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	10.45	10.93	11.09	10.67	10.77	10.69	10.68	10.18	9.99	10.18	10.03	10.08	10.37
1984	10.32	10.46	10.00	9.97	10.08	10.18	10.37	10.11	10.35	10.47	10.39	10.47	11.03
1985	10.80	10.99	10.63	10.55	10.47	10.36	10.76	10.62	10.71	10.99	10.94	11.08	11.42
1986	11.33	11.44	11.16	11.28	11.37	11.41	11.38	10.85	11.35	11.58	11.15	11.43	11.54
1987		11.67	11.53										

PRODUCTION-WORKER AVERAGE WEEKLY HOURS

Year	Annual avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	41.1	39.7	40.8	40.8	41.3	41.3	42.1	39.3	40.6	41.5	42.1	41.6	41.5
1984	41.5	41.3	40.8	40.8	41.6	41.1	42.3	40.0	42.1	42.0	42.1	40.8	42.4
1985	41.0	42.5	40.0	40.8	41.0	39.9	40.7	40.0	40.7	41.8	41.8	41.0	42.0
1986	41.5	41.6	40.8	41.8	41.1	41.2	42.0	39.6	40.9	42.1	41.3	41.9	42.8
1987		41.7	42.1										

See footnotes at end of tables.

SIC 2396—AUTOMOTIVE AND APPAREL TRIMMINGS (Con.)

PRODUCTION-WORKER AVERAGE WEEKLY OVERTIME HOURS

Year	Annual avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	3.6	2.5	3.4	3.9	3.5	3.7	4.2	2.7	3.5	4.3	4.4	4.0	4.0
1984	4.1	4.1	3.6	3.3	4.3	3.9	4.9	2.6	5.0	4.7	4.5	4.0	5.4
1985	4.3	5.3	3.9	3.8	4.1	3.2	4.2	3.5	4.7	5.0	4.9	4.6	5.3
1986	5.3	5.0	4.3	5.0	5.1	5.2	5.6	3.8	5.3	6.0	4.8	5.6	7.1
1987		6.9	6.6										

SIC 26—PAPER AND ALLIED PRODUCTS

ALL EMPLOYEES—IN THOUSANDS

Year	Annual avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	661.2	656.3	648.-	656.7	657.8	657.0	664.1	661.7	666.4	668.9	669.5	670.4	672.8
1984	680.9	671.2	673.4	676.1	676.6	678.8	689.2	685.7	688.7	682.8	683.8	682.1	682.2
1985	677.7	677.8	676.3	677.6	676.1	677.6	683.4	683.1	680.5	675.2	674.2	675.9	674.6
1986	674.3	675.1	667.9	669.2	669.3	671.2	680.9	674.3	674.8	676.8	678.2	678.8	675.7
1987		674.0	673.7										

WOMEN EMPLOYEES—IN THOUSANDS

Year	Annual avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	153.3	147.5	147.5	149.1	151.3	152.5	154.6	153.6	155.9	156.9	157.3	158.5	159.7
1984	161.1	155.8	156.8	157.6	158.7	160.5	164.1	163.6	164.9	162.9	163.3	162.5	162.2
1985	163.6	160.8	160.2	161.4	162.2	163.4	166.7	165.4	166.4	164.9	164.5	164.8	162.3
1986	163.5	160.5	160.2	161.4	162.0	162.9	165.6	164.6	164.9	165.2	165.4	164.9	164.8
1987		161.9	162.0										

PRODUCTION WORKERS—IN THOUSANDS

Year	Annual avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	494.5	483.4	482.4	485.1	488.0	491.7	498.0	496.0	497.9	501.4	501.8	502.9	504.8
1984	511.6	502.5	505.4	508.3	508.8	510.4	519.2	515.2	517.1	512.7	513.3	512.6	512.6
1985	512.1	510.4	508.9	511.6	509.6	511.1	518.8	513.3	515.6	512.3	510.1	512.8	510.5
1986	511.4	507.2	505.8	507.2	507.4	508.3	517.4	510.6	511.4	513.5	514.3	515.6	517.2
1987		511.4	511.6										

PRODUCTION-WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

Year	Annual avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	423.02	402.82	397.99	406.56	410.61	416.93	425.14	429.56	428.43	438.92	435.46	439.34	447.20
1984	448.67	439.62	437.15	436.39	441.18	441.87	447.38	453.41	449.16	456.13	453.41	460.71	465.84
1985	466.77	454.96	451.14	454.33	458.82	466.10	463.97	466.28	466.75	475.02	473.27	478.07	492.40
1986	482.98	480.68	474.96	480.00	474.22	479.45	481.43	486.06	483.41	485.14	484.88	489.12	500.09
1987		488.68	484.18										

PRODUCTION-WORKER AVERAGE HOURLY EARNINGS—IN DOLLARS

Year	Annual avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	9.93	9.66	9.66	9.68	9.73	9.81	9.91	10.06	10.01	10.09	10.08	10.17	10.21
1984	10.41	10.20	10.19	10.22	10.26	10.35	10.38	10.52	10.47	10.51	10.52	10.64	10.66
1985	10.83	10.63	10.64	10.68	10.72	10.75	10.79	10.92	10.88	10.92	10.93	10.99	11.09
1986	11.18	11.05	11.02	11.06	11.08	11.15	11.17	11.33	11.19	11.23	11.25	11.27	11.34
1987		11.26	11.26										

PRODUCTION-WORKER AVERAGE WEEKLY HOURS

Year	Annual avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	42.6	41.7	41.2	42.0	42.2	42.5	42.9	42.7	42.8	43.5	43.2	43.2	43.8
1984	43.2	43.1	42.9	42.7	43.0	42.9	43.1	43.1	42.9	43.4	43.1	43.3	43.7
1985	43.1	42.8	42.4	42.7	42.8	42.8	43.8	42.7	42.9	43.5	43.3	43.5	44.4
1986	43.2	43.5	43.1	43.4	42.8	43.0	43.1	42.9	43.2	43.2	43.1	43.4	44.1
1987		43.4	43.0										

PRODUCTION-WORKER AVERAGE WEEKLY OVERTIME HOURS

Year	Annual avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	4.6	3.9	3.9	4.1	4.3	4.4	4.6	4.8	4.9	5.4	5.1	4.8	5.1
1984	4.9	4.9	4.7	4.8	4.7	4.8	4.9	5.2	4.9	5.3	5.0	5.0	5.0
1985	4.7	4.6	4.4	4.4	4.6	4.4	4.6	4.8	4.7	5.0	4.8	4.8	5.2
1986	4.8	4.8	4.6	4.7	4.6	4.6	4.6	5.0	4.9	5.1	4.9	5.0	5.2
1987		4.9	4.7										

DEPARTMENT OF LABOR
Bureau of Labor Statistics

Producer Price Index

PI 09 Pulp, paper, and allied products

BASE 1967 = 100

YR	ANN AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1947	72.5	70.6	71.2	71.7	72.6	72.4	72.4	72.4	72.8	73.1	73.5	73.6	74.5
1948	75.7	75.0	75.9	75.6	75.5	75.3	75.4	75.7	76.0	76.1	76.1	76.0	75.9
1949	72.4	75.9	75.6	75.1	74.2	73.0	71.6	70.6	70.4	70.7	70.7	70.9	70.9
1950	74.3	70.9	70.8	70.6	70.6	70.4	70.6	72.0	74.7	76.2	79.0	80.8	84.2
1951	88.0	88.3	88.6	88.5	88.1	88.2	88.4	88.4	88.0	87.9	87.4	87.1	87.1
1952	85.7	87.0	87.1	86.6	86.4	86.0	85.8	84.9	85.1	85.1	85.0	85.0	85.3
1953	85.5	85.3	84.9	84.7	84.9	84.9	85.3	85.3	85.5	86.0	86.5	86.3	86.1
1954	85.5	86.1	86.1	85.8	85.5	85.3	85.3	85.5	85.5	85.5	85.5	85.4	85.3
1955	87.8	85.5	85.8	85.9	86.4	86.6	87.1	87.6	88.1	88.6	90.4	90.7	90.9
1956	93.6	91.8	92.3	93.4	93.7	93.6	93.7	93.9	94.1	94.1	94.3	94.0	94.2
1957	95.4	94.6	94.6	94.7	94.6	94.9	94.9	95.3	95.6	95.8	96.3	96.3	96.4
1958	96.4	96.2	96.2	96.1	96.1	96.1	96.1	96.4	96.4	96.9	97.1	97.1	96.6
1959	97.3	96.7	96.9	97.1	97.3	97.1	97.4	97.4	97.4	97.4	97.5	97.6	97.4
1960	98.1	98.4	98.0	98.0	98.0	98.2	98.3	98.3	97.9	97.9	98.2	98.0	97.6
1961	95.2	97.3	97.3	96.7	96.4	92.8	93.1	93.1	93.0	95.3	96.0	95.6	96.0
1962	96.3	96.2	96.2	97.3	97.6	97.1	96.8	96.3	96.1	95.9	95.7	95.5	95.4
1963	95.6	95.4	95.5	95.4	95.4	95.5	95.8	95.4	95.5	95.5	95.9	95.8	95.8
1964	95.4	96.1	96.2	95.7	95.5	95.1	95.1	95.1	95.1	95.1	95.5	95.3	95.3
1965	96.2	95.4	95.4	95.9	96.1	96.3	96.3	96.2	96.2	96.3	96.8	97.1	97.2
1966	98.8	97.5	97.6	98.1	98.6	98.9	99.2	99.4	99.4	99.3	99.3	99.2	99.2
1967	100.0	99.2	99.4	99.7	99.9	99.9	99.9	100.1	99.9	100.0	100.2	100.6	100.8
1968	101.1	100.9	101.3	101.2	101.2	101.3	100.8	101.0	100.9	101.1	101.2	101.2	101.3
1969	104.0	102.3	102.7	103.4	103.6	103.8	103.9	103.9	104.5	104.8	105.1	105.4	105.6
1970	108.2	107.4	107.7	108.0	108.4	108.0	108.0	108.3	108.1	108.4	108.8	108.8	108.6
1971	110.1	109.1	109.1	109.4	109.6	109.9	110.3	110.5	110.7	110.7	110.6	110.6	110.7
1972	113.4	110.8	111.6	112.3	112.8	113.2	113.5	113.7	114.1	114.3	114.7	115.0	115.1
1973	122.1	115.8	116.5	118.3	119.8	120.7	122.0	122.3	123.3	124.4	125.8	127.6	128.7
1974	151.7	131.8	132.9	137.2	144.4	144.6	147.5	153.3	162.9	164.2	166.0	166.9	167.2
1975	170.4	169.8	169.8	170.0	169.7	169.8	169.8	170.0	170.0	170.3	170.9	171.3	173.1
1976	179.4	174.8	175.7	176.9	178.6	179.3	179.6	180.5	181.0	181.4	181.4	181.5	181.8
1977	186.4	182.9	183.0	183.6	185.3	186.2	187.3	187.8	187.8	188.1	188.7	188.2	187.6
1978	195.6	188.0	188.6	189.7	191.9	193.2	193.5	195.5	195.8	199.0	200.4	200.9	205.2
1979	219.0	207.0	208.8	212.3	215.0	216.2	216.6	218.3	222.2	223.0	227.5	229.5	231.7
1980	249.2	237.4	239.2	242.6	247.8	249.2	251.1	251.7	252.4	252.8	254.2	255.0	256.7
1981	273.8	264.4	267.2	269.0	271.4	2/.	272.9	274.9	275.9	277.8	279.1	280.4	281.0
1982	288.7	285.5	286.3	287.4	288.5	289.6	289.5	289.1	289.3	289.4	289.8	289.8	289.5
1983	298.1	293.6	294.2	294.8	295.4	296.0	297.0	297.8	298.8	299.9	302.2	302.4	304.0
1984	318.5	309.1	312.0	314.0	316.3	317.7	318.4	319.8	321.3	322.0	323.1	324.1	324.1
1985	327.2	327.1	327.6	327.7	327.6	327.3	327.1	326.8	326.9	326.6	327.2	327.3	327.4
1986	335.3	330.6	331.1	331.3	332.8	333.8	334.2	335.2	336.4	337.8	339.4	340.4	340.9
1987	NA	345.0	347.4	348.1	349.2	349.2	350.0	351.5	352.7	354.9	356.9	NA	NA

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BEST AVAILABLE COPY

Producer Price Index

Hides, skins, leather, and related products — BASE 1967 = 100

YR	ANN AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1926	44.8	46.3	45.5	44.9	44.3	44.4	44.3	44.4	44.6	44.3	45.3	45.0	45.0
1927	48.3	45.3	44.8	45.0	45.6	46.4	48.0	50.0	50.0	50.4	50.5	51.0	52.2
1928	54.4	54.1	55.4	55.4	56.6	56.4	55.4	55.4	54.1	54.0	52.5	51.7	51.8
1929	48.9	50.8	48.8	48.4	48.3	47.8	48.4	48.9	49.1	49.6	49.5	48.5	48.2
1930	44.9	47.1	46.5	46.3	46.0	46.0	45.9	45.2	44.4	44.6	43.3	42.2	40.9
1931	38.6	39.7	38.9	39.2	39.2	39.2	39.4	40.1	39.7	38.1	37.0	36.6	35.8
1932	32.8	35.5	35.1	34.6	33.7	32.5	31.8	30.7	31.3	32.4	32.6	32.0	31.3
1933	36.3	30.9	30.4	30.5	31.1	34.5	37.0	38.7	41.0	41.4	39.9	39.6	40.0
1934	38.8	40.1	40.2	39.7	39.9	39.4	39.1	38.7	37.5	37.7	37.6	37.7	38.2
1935	40.2	38.6	38.6	38.3	38.7	39.6	39.8	40.0	40.2	40.8	42.0	42.7	42.7
1936	42.7	43.5	43.1	42.6	42.4	42.1	42.1	41.9	42.0	42.4	42.8	43.4	44.6
1937	46.9	45.6	46.0	46.6	47.7	47.8	47.8	47.8	48.4	48.2	47.8	45.4	43.8
1938	41.6	43.4	42.5	42.0	41.3	40.9	40.4	40.9	41.2	41.2	41.9	42.4	41.7
1939	42.8	41.7	41.2	41.1	40.8	41.0	41.4	41.5	41.5	44.2	46.9	46.5	46.5
1940	45.2	46.4	45.9	45.7	45.6	45.4	44.5	44.4	43.4	44.0	45.0	45.9	45.9
1941	48.4	45.9	45.6	46.0	46.5	47.7	48.3	49.1	49.4	49.9	50.4	51.2	51.5
1942	52.8	51.6	51.7	52.3	53.5	53.3	53.0	53.0	53.0	52.9	52.8	52.8	52.8
1943	52.7	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.2	52.4
1944	52.2	52.5	52.4	52.4	52.4	52.4	52.2	52.1	51.9	52.0	52.1	52.1	52.6
1945	52.9	52.7	52.8	52.8	52.8	52.8	52.8	52.9	52.9	53.2	53.2	53.3	53.4
1946	61.1	53.5	53.6	53.6	53.6	54.0	54.9	63.3	62.3	63.5	63.8	77.3	79.2
1947	83.3	79.0	79.5	80.1	79.3	78.8	79.4	81.5	83.8	84.6	89.2	92.4	91.9
1948	84.2	89.7	85.5	82.2	83.3	84.5	84.4	85.0	83.9	83.0	82.3	83.7	82.9
1949	79.9	82.7	80.7	79.4	79.1	78.8	78.9	78.0	78.9	79.9	80.7	80.9	80.5
1950	86.3	79.4	79.2	80.1	80.1	80.9	81.7	85.4	87.8	91.2	93.1	96.1	100.1
1951	99.1	104.9	105.3	104.6	104.3	104.1	102.8	100.9	97.3	97.3	93.7	88.3	86.6
1952	80.1	84.3	82.0	80.8	77.5	78.1	79.1	79.3	79.5	79.5	79.6	80.5	81.6
1953	81.3	80.2	80.8	80.9	80.7	82.7	83.2	82.5	82.4	82.2	80.1	80.1	78.8
1954	77.6	78.6	78.2	78.1	78.0	79.1	78.8	78.2	77.5	76.7	76.2	76.5	75.6
1955	77.3	75.7	76.1	76.0	76.9	76.6	76.6	77.3	77.3	77.5	78.6	79.4	79.7
1956	81.9	79.7	80.1	80.6	82.9	82.5	82.6	82.6	82.3	82.6	82.2	82.3	81.8
1957	82.0	81.1	80.8	81.1	81.3	81.5	82.3	82.9	82.7	82.5	82.6	82.5	82.0
1958	82.9	82.0	82.1	82.0	82.2	82.4	82.7	82.7	82.8	82.6	83.6	84.4	85.4
1959	94.2	85.8	86.9	89.5	97.2	97.7	98.0	98.4	98.7	98.2	95.8	92.1	92.6
1960	90.8	92.9	92.3	92.1	92.4	9.7	90.9	90.8	89.6	89.1	89.5	89.5	89.7
1961	91.7	89.3	89.0	90.2	90.6	91.3	90.8	91.6	93.3	93.6	94.0	93.8	93.4
1962	92.7	93.4	93.0	92.7	92.3	92.6	93.3	92.8	92.4	92.8	92.7	92.7	92.3
1963	90.0	91.5	90.8	90.8	90.2	90.5	90.2	90.1	89.5	89.0	89.3	89.4	88.9
1964	90.3	88.7	88.5	88.5	90.2	90.4	90.5	91.0	91.2	91.0	91.5	91.1	91.0
1965	94.3	90.6	90.8	91.3	91.8	92.7	93.0	94.0	96.9	96.1	97.8	98.1	99.0
1966	103.4	100.2	101.7	102.5	104.1	106.0	106.1	106.0	104.7	103.5	102.5	101.5	101.3
1967	100.0	101.9	102.0	101.1	99.9	99.5	99.8	99.5	98.6	98.9	99.1	99.7	100.3
1968	103.2	100.7	100.9	101.8	102.2	102.6	102.5	103.2	103.2	104.2	105.6	105.7	106.0
1969	108.9	106.7	106.6	106.6	108.9	108.9	108.6	109.2	109.4	111.1	110.4	110.3	109.9
1970	110.3	110.2	110.3	110.3	111.0	110.5	109.9	109.8	109.8	109.9	110.4	110.9	110.4
1971	114.1	111.8	112.3	112.4	114.0	114.4	114.3	114.3	114.5	114.7	114.7	115.1	116.2
1972	131.3	117.8	119.1	123.0	127.2	129.5	130.9	131.6	134.6	135.7	139.8	144.0	142.2
1973	143.1	143.9	144.9	143.5	145.0	142.2	140.9	141.4	143.0	143.8	143.8	143.0	141.9
1974	145.1	142.6	143.4	143.4	145.4	146.3	146.0	146.6	146.2	148.1	145.2	144.5	143.2

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PPI 04 Hides, skins, leather, and related products

BASE 1967 = 100

YR	ANN AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1975	148.5	142.1	141.7	143.2	147.5	147.7	148.7	149.3	149.3	151.3	152.4	154.4	154.6
1976	167.8	158.2	160.8	162.9	166.1	170.1	168.1	170.3	171.6	173.6	170.9	169.8	171.5
1977	179.3	175.3	176.9	177.9	179.9	181.9	179.4	180.0	180.2	179.6	179.2	180.0	181.5
1978	200.0	185.8	187.2	187.9	191.9	193.6	195.3	197.3	205.1	210.7	213.0	215.8	216.2
1979	252.4	223.4	232.2	253.3	258.9	269.6	268.0	261.9	257.9	251.1	233.9	248.9	249.2
1980	248.9	255.7	250.9	246.8	243.5	240.7	240.9	245.1	251.3	247.8	251.2	255.4	256.9
1981	260.9	258.2	257.7	261.2	263.5	263.7	261.6	261.1	261.3	261.7	260.0	259.8	260.7
1982	262.6	261.8	261.6	260.6	263.4	263.2	261.8	263.1	262.0	263.5	263.2	263.2	264.1
1983	271.1	266.7	264.3	264.9	267.4	269.4	271.2	272.3	274.7	274.4	273.7	277.0	277.3
1984	286.3	279.1	283.3	286.7	286.8	288.5	290.1	288.9	288.7	288.7	287.7	283.8	283.6
1985	286.1	283.7	283.7	282.4	284.7	284.2	285.5	284.6	286.3	287.2	288.6	290.0	292.4
1986	296.7	293.7	294.1	293.6	295.0	296.5	297.9	297.4	297.0	296.4	297.8	299.3	301.6
1987	NA	301.9	302.0	305.9	310.6	317.0	315.8	317.8	318.5	321.4	326.5	NA	NA

NA NOT AVAILABLE

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SIC 307—MISCELLANEOUS PLASTICS PRODUCTS (Con.)

PRODUCTION-WORKER AVERAGE WEEKLY HOURS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1957	40.3	40.6	40.7	41.0	40.0	39.7	40.2	40.8	40.6	40.5	40.2	39.6	40.1
1958	39.8	39.3	39.0	39.0	38.9	39.2	39.9	39.8	39.7	40.9	40.5	40.6	40.9
1959	40.9	40.6	41.0	40.6	40.8	41.3	41.3	40.8	40.9	40.7	41.1	40.8	41.1
1960	40.2	40.8	40.5	40.6	39.5	40.4	40.5	40.2	40.5	39.9	40.2	40.0	38.7
1961	40.7	39.6	39.9	40.0	40.2	40.7	41.3	40.6	40.9	41.2	41.0	41.2	41.1
1962	41.1	40.7	40.8	41.1	41.3	41.4	41.8	41.0	41.1	41.4	40.9	40.6	41.0
1963	41.3	41.0	41.0	41.1	40.4	41.1	41.3	41.2	41.8	41.9	41.5	41.2	41.9
1964	41.5	41.6	41.3	41.6	41.7	41.7	41.6	41.0	41.8	41.8	41.6	41.6	41.7
1965	41.6	41.6	41.5	41.7	40.7	41.7	42.0	41.1	41.5	41.8	42.0	41.9	42.0
1966	41.4	41.5	41.6	41.6	41.3	41.5	41.6	40.9	41.3	41.6	41.5	41.3	41.1
1967	40.6	40.6	40.1	40.4	40.4	40.4	40.8	40.4	41.0	40.9	40.6	40.6	40.7
1968	40.8	40.3	40.7	40.6	39.5	40.9	41.0	40.7	41.1	41.4	40.9	40.9	40.9
1969	40.3	40.3	39.4	40.6	40.4	40.6	40.6	39.9	40.2	40.5	40.5	40.3	40.5
1970	39.9	39.9	39.9	39.9	39.7	39.7	40.1	39.7	40.1	40.0	40.1	39.7	39.9
1971	40.1	39.8	39.6	40.0	39.8	40.0	40.4	39.8	40.0	40.1	40.4	40.4	40.7
1972	40.7	40.1	40.2	40.6	40.8	40.7	40.9	40.4	40.9	40.8	40.7	40.9	41.0
1973	40.4	40.2	40.3	40.5	40.6	40.6	40.4	40.3	40.3	40.5	40.1	40.7	40.6
1974	39.8	39.8	40.1	40.2	39.1	39.9	40.1	39.5	40.0	39.9	39.9	39.5	39.6
1975	39.8	38.9	38.4	38.9	39.1	39.4	39.8	39.6	40.0	40.5	40.4	40.6	41.1
1976	40.3	40.3	40.3	40.4	39.3	40.4	40.5	40.5	40.3	39.9	40.3	40.5	40.9
1977	40.5	39.4	40.3	40.4	40.2	40.4	41.0	40.0	40.4	40.8	40.9	40.9	41.1
1978	40.6	39.5	39.3	40.9	40.7	40.4	41.0	40.4	40.5	40.9	40.8	40.8	41.3
1979	40.3	40.5	40.5	41.0	39.1	40.4	40.7	40.2	40.0	40.4	40.4	40.3	40.6
1980	40.0	40.1	39.9	40.1	39.0	39.3	39.3	38.9	39.9	39.9	40.4	40.7	41.3
1981	40.2	40.5	39.9	40.0	40.4	40.7	40.8	39.8	40.3	39.8	40.0	39.8	40.0
1982	38.5	37.7	39.7	38.6	39.4	39.7	39.9	39.5	39.7	39.6	39.3	39.6	40.2
1983	41.2	39.9	39.5	40.7	41.2	41.3	41.4	41.0	41.1	41.7	41.6	41.0	42.1
1984		41.6	41.5	41.2	41.7	41.3	41.4	41.0					

PRODUCTION-WORKER AVERAGE WEEKLY OVERTIME HOURS

1958	1.7	1.2	1.5	1.3	1.0	1.1	1.7	1.6	1.7	2.4	2.2	2.2	2.4
1959	3.0	2.9	2.9	2.8	3.0	3.3	3.2	3.0	3.1	3.1	3.1	2.9	2.9
1960	2.5	2.9	2.8	2.7	2.0	2.5	2.6	2.6	2.6	2.6	2.4	2.3	2.1
1961	2.9	2.0	2.1	2.2	2.5	2.9	3.1	2.9	3.3	3.5	3.2	3.3	3.2
1962	3.2	2.9	2.9	3.1	3.3	3.4	3.5	3.1	3.0	3.4	3.1	3.2	3.1
1963	3.3	3.0	3.2	3.4	2.5	3.1	3.3	3.5	3.8	3.8	3.5	3.3	3.4
1964	3.7	3.7	3.2	3.1	3.6	4.0	3.7	3.5	4.2	4.2	4.1	3.7	4.0
1965	4.0	3.7	3.8	4.0	3.1	4.0	4.0	3.5	4.0	4.3	4.5	4.3	4.4
1966	4.1	4.0	4.0	4.2	3.9	4.2	4.2	3.6	4.1	4.6	4.4	4.1	3.7
1967	3.5	3.4	3.3	3.4	3.0	3.4	3.7	3.2	3.7	3.9	3.7	3.7	3.5
1968	3.8	3.6	3.5	3.6	3.1	3.8	4.0	3.9	3.9	4.3	4.1	4.1	4.0
1969	3.7	3.9	3.5	3.9	3.8	3.9	4.0	3.4	3.7	3.8	3.8	3.6	3.6
1970	3.1	3.2	3.2	3.2	3.1	3.1	3.3	3.1	3.3	3.3	3.2	3.0	2.7
1971	3.2	2.7	2.9	3.0	2.9	3.2	3.5	3.1	3.4	3.5	3.5	3.3	3.4
1972	3.8	3.2	3.3	3.5	3.7	3.6	3.8	3.6	3.9	4.2	4.0	4.1	4.1
1973	3.9	3.8	3.7	3.8	4.0	3.8	4.0	3.8	4.0	4.2	3.8	3.9	3.6
1974	3.1	3.3	3.2	3.4	2.4	3.2	3.3	3.2	3.4	3.4	3.2	2.7	2.4
1975	2.8	2.1	2.0	2.2	2.2	2.4	2.7	2.8	3.0	3.4	3.3	3.3	3.4
1976	3.2	3.0	3.1	3.4	2.4	3.3	3.5	3.1	3.3	3.5	3.4	3.3	3.4
1977	3.4	3.2	3.2	3.2	3.4	3.4	3.6	3.2	3.3	3.7	3.6	3.5	3.4
1978	3.5	3.2	3.4	3.6	3.5	3.3	3.6	3.3	3.4	3.7	3.7	3.6	3.5
1979	3.2	3.4	3.3	3.5	2.3	3.3	3.4	3.0	3.2	3.3	3.4	3.3	3.2

See footnotes at end of tables.

SIC 307—MISCELLANEOUS PLASTICS PRODUCTS (Con.)

PRODUCTION-WORKER AVERAGE WEEKLY OVERTIME HOURS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1980	2.9	3.1	3.0	3.1	2.7	2.4	2.4	2.3	2.9	3.1	3.2	3.3	3.5
1981	3.1	3.2	3.0	3.2	3.0	3.3	3.4	3.1	3.2	3.3	3.0	2.8	2.8
1982	2.8	2.6	2.7	2.7	2.6	2.8	2.9	2.7	3.0	2.9	2.7	2.8	3.0
1983	3.6	2.8	2.9	3.3	3.5	3.6	3.7	3.6	3.7	4.1	4.0	3.9	4.0
1984		4.0	3.9	3.9	4.0	3.6	3.7	3.6					

SIC 31—LEATHER AND LEATHER PRODUCTS

ALL EMPLOYEES—IN THOUSANDS

1939	386	381	398	403	390	366	373	395	401	394	389	372	374
1940	374	384	391	386	371	346	349	370	376	377	379	373	386
1941	415	395	408	415	412	405	415	427	428	422	421	415	422
1942	413	418	425	432	426	420	416	413	405	395	396	403	405
1943	381	405	403	400	383	386	383	380	375	364	364	365	362
1944	359	360	363	363	361	358	359	358	356	354	355	357	359
1945	358	359	359	358	355	354	358	355	356	346	356	363	373
1946	408	383	396	404	408	411	415	414	415	419	412	411	412
1947	412	407	411	412	406	395	394	399	412	419	425	428	431
1948	412	431	436	430	405	391	403	405	417	415	414	401	398
1949	389	398	402	400	391	374	382	384	398	396	391	373	383
1950	395	389	396	397	380	375	383	391	409	411	406	399	398
1951	380.0	403.4	413.0	409.0	390.6	366.2	379.5	373.0	381.4	365.3	359.5	356.6	362.6
1952	384.2	389.0	381.9	383.0	374.8	368.5	378.2	377.9	395.6	393.4	393.6	395.5	399.3
1953	389.2	400.3	404.6	404.0	394.9	383.9	391.7	385.8	393.1	383.7	377.3	376.2	375.2
1954	373.0	374.2	381.6	380.5	367.4	357.1	367.0	370.6	380.5	373.3	372.1	374.5	377.4
1955	385.9	379.8	387.4	389.5	380.3	374.0	386.1	386.0	395.8	390.7	388.8	378.0	394.1
1956	382.7	394.2	399.3	393.9	380.8	373.3	382.5	377.8	385.8	376.9	375.8	375.1	377.5
1957	372.7	374.8	378.9	379.4	372.3	363.5	371.0	369.5	379.0	373.8	371.1	370.3	388.3
1958	358.2	365.9	368.9	361.6	341.1	342.2	354.6	354.4	364.1	362.5	357.0	366.8	370.7
1959	374.0	369.7	374.2	372.9	366.5	366.9	376.1	375.9	381.5	378.0	375.6	375.9	374.1
1960	363.4	370.1	369.0	367.6	357.1	355.4	363.9	362.8	373.0	363.4	360.1	361.0	357.8
1961	358.2	357.4	360.7	357.0	349.8	350.0	360.9	356.9	366.4	358.1	356.7	361.1	363.2
1962	360.7	360.3	362.9	363.1	359.1	354.9	363.1	358.0	368.2	360.6	358.4	360.5	358.1
1963	349.2	351.2	354.2	351.7	341.8	342.0	349.8	349.5	356.6	351.2	348.7	347.6	346.3
1964	347.6	341.2	346.1	344.9	339.4	340.4	349.6	349.5	355.9	350.7	349.3	351.9	352.9
1965	352.9	347.6	351.8	352.7	342.3	346.1	352.2	350.5	360.2	355.5	354.5	360.0	361.1
1966	363.6	359.7	365.8	365.2	361.0	362.6	368.7	356.7	371.3	363.5	361.7	364.0	362.4
1967	350.9	357.6	357.8	351.6	345.9	345.3	351.0	341.5	353.0	348.2	349.6	354.5	356.3
1968	355.2	351.8	355.4	354.4	351.4	353.8	361.4	347.2	361.2	355.2	355.2	359.2	355.8
1969	343.2	352.5	351.9	348.4	343.1	344.4	348.7	339.2	348.4	333.1	334.7	337.0	336.7
1970	319.5	331.8	329.1	325.4	322.2	321.4	327.4	318.3	319.4	312.2	310.1	309.4	306.8
1971	299.1	303.4	301.9	299.0	298.5	300.4	306.1	291.1	303.6	295.8	294.2	298.3	297.2
1972	296.0	295.1	298.6	297.0	295.1	299.9	306.2	290.6	303.0	294.8	291.8	291.8	288.6
1973	284.0	283.2	284.5	284.3	284.4	286.5	292.8	274.2	286.1	282.9	282.2	284.7	281.9
1974	271.1	275.1	275.7	277.6	276.3	277.0	281.7	267.0	277.2	267.2	261.3	262.8	256.6
1975	248.2	242.7	237.6	234.0	235.6	243.1	251.4	242.4	254.7	254.1	258.1	262.1	262.7
1976	262.7	261.9	265.8	266.8	269.6	271.5	274.7	258.7	264.3	258.9	253.8	254.4	252.4
1977	254.8	251.1	252.6	254.5	255.8	260.8	262.1	242.0	255.7	252.0	257.0	258.2	255.4
1978	256.8	251.3	254.5	255.9	258.3	260.8	265.7	244.3	260.9	259.4	258.3	257.8	254.2
1979	245.7	249.4	248.4	249.5	248.9	252.7	256.8	226.2	247.3	244.1	243.4	242.8	238.3
1980	232.9	235.2	236.0	236.6	236.5	236.2	237.1	212.2	234.7	233.4	232.9	233.3	230.2
1981	237.7	227.9	230.7	231.3	235.2	239.7	243.4	234.2	245.6	245.5	243.8	241.2	233.7

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SIC 31—LEATHER AND LEATHER PRODUCTS (Con.)

ALL EMPLOYEES—IN THOUSANDS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1982	218.9	227.2	223.4	222.7	224.1	223.7	226.7	207.1	219.9	217.3	214.5	213.8	205.9
1983	207.9	204.1	203.6	204.3	205.6	207.7	211.1	195.7	213.0	212.7	213.5	213.7	208.2
1984		206.5	207.0	205.5	206.9	207.3	208.0	194.2					

WOMEN EMPLOYEES—IN THOUSANDS

1950		178.6			175.2			178.7			189.6		
1951		186.8			184.8			176.4			172.6		
1952		177.1			186.7			188.2			198.4		
1953		201.4			200.6			194.4			189.8		
1954		188.6			186.3			185.7			181.5		
1955		192.2			192.8			195.3			197.9		
1956		201.0			192.7			191.9			190.9		
1957		190.8			188.9			188.1			190.7		
1958		187.9			173.3			181.4			184.2		
1959	194.5	190.4	193.9	192.3	188.3	190.2	195.9	195.3	190.6	198.1	196.7	197.2	195.5
1960	188.6	192.1	191.7	191.5	185.0	183.7	188.4	187.6	194.0	189.2	187.0	188.3	184.2
1961	186.2	185.0	187.7	184.9	180.6	180.7	187.4	185.0	190.6	186.4	185.8	189.6	190.6
1962	188.8	187.6	188.1	190.1	188.0	185.5	190.6	188.1	193.6	189.4	188.4	189.5	187.8
1963	183.4	183.1	185.7	184.6	178.3	178.6	183.3	183.5	187.8	185.0	184.4	183.8	182.2
1964	183.2	179.2	182.1	181.6	177.5	178.8	184.5	184.3	187.8	185.2	184.3	186.7	185.9
1965	188.0	183.5	185.9	186.5	180.2	184.0	187.5	185.5	192.2	189.9	190.3	194.7	195.3
1966	200.2	193.8	198.3	198.7	196.7	198.3	203.3	195.6	204.3	202.4	202.7	204.2	202.6
1967	196.0	198.7	199.9	195.6	192.5	192.4	195.9	188.0	197.0	194.8	196.1	200.0	199.6
1968	200.6	196.2	199.3	198.7	197.0	200.0	204.4	194.7	203.9	200.9	202.0	205.9	203.1
1969	196.2	200.3	198.3	197.6	195.0	197.0	199.8	192.9	199.3	198.9	199.1	195.0	194.4
1970	184.5	191.0	188.7	187.6	185.3	185.7	189.3	184.1	185.3	180.3	179.5	179.9	177.5
1971	174.9	175.9	174.4	172.9	172.8	175.0	179.4	171.0	178.4	173.8	173.1	176.5	175.0
1972	176.6	174.0	176.5	175.2	174.6	178.2	182.4	172.9	180.7	177.0	175.7	177.0	174.9
1973	172.8	171.4	172.0	171.8	172.7	175.0	178.6	165.2	174.4	172.4	173.1	174.6	172.1
1974	165.1	167.4	167.7	168.0	168.7	169.9	172.5	163.4	168.0	163.0	158.5	158.4	152.7
1975	149.9	146.3	142.6	140.8	140.7	146.4	151.7	145.4	154.6	154.0	156.8	158.5	158.5
1976	158.9	158.7	160.6	160.4	161.9	163.9	165.9	157.4	160.0	156.7	154.1	154.4	152.6
1977	153.1	150.8	151.4	152.6	153.2	156.6	157.2	145.0	153.9	151.8	155.2	156.3	153.7
1978	155.7	150.9	153.0	153.5	155.6	157.8	161.6	148.5	158.5	156.6	157.9	157.3	153.8
1979	149.1	151.0	150.2	150.9	151.0	154.3	156.3	136.2	149.7	148.7	148.5	148.0	144.5
1980	140.0	141.9	143.1	143.2	143.4	142.5	143.1	126.6	141.0	140.2	139.1	139.2	136.0
1981	142.1	135.0	137.2	137.7	138.9	142.8	145.7	140.0	147.5	147.6	146.9	145.2	139.9
1982	130.1	135.5	132.4	132.1	133.0	133.2	134.8	123.0	131.3	129.5	128.0	127.1	121.8
1983	122.8	120.9	119.9	120.6	121.0	122.6	124.8	115.9	125.6	126.0	126.2	127.0	122.9
1984		121.9	122.5	121.3	122.1	122.5	123.6	114.6					

PRODUCTION WORKERS—IN THOUSANDS

1919	335												
1980	310												
1981	287												
1982	277												
1983	297												
1984	320												
1985	327												
1986	333												
1987	340												
1988	331												
1989	340	344	360	365	352	330	337	357	364	357	351	336	337

See footnotes at end of tables.

SIC 31—LEATHER AND LEATHER PRODUCTS (Con.)

PRODUCTION WORKERS—IN THOUSANDS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1940	337	347	354	349	335	311	313	334	339	340	342	336	340
1941	378	357	370	378	376	367	378	389	391	384	384	370	385
1942	379	382	389	397	391	387	392	379	372	363	364	371	374
1943	351	374	372	369	353	356	353	351	347	337	336	336	333
1944	328	331	333	333	331	327	328	327	326	323	323	325	327
1945	325	327	327	326	322	321	326	322	323	312	322	329	340
1946	372	349	361	369	372	374	378	377	377	381	374	381	375
1947	374	370	374	375	370	357	357	361	374	381	386	389	392
1948	369	389	383	367	362	349	360	363	373	371	370	358	355
1949	348	356	360	350	340	333	340	343	356	354	340	332	343
1950	355	340	357	357	341	335	343	351	369	371	366	350	350
1951	340.8	363.9	373.4	369.3	351.1	327.4	340.8	334.6	341.7	326.6	320.3	317.0	323.1
1952	344.4	338.3	341.8	342.8	334.7	328.3	338.5	338.0	356.0	353.7	353.1	355.6	359.4
1953	348.7	358.9	364.1	364.0	355.0	344.4	351.7	344.9	351.4	342.6	336.6	335.6	334.7
1954	332.5	333.8	340.8	339.8	327.4	317.5	326.3	329.8	338.8	332.6	331.2	334.1	336.6
1955	344.0	338.4	346.3	348.6	338.2	332.9	344.4	343.9	353.4	348.1	346.4	334.9	351.5
1956	348.9	351.6	356.6	351.8	338.2	331.5	340.8	336.6	344.1	335.8	334.5	333.8	336.8
1957	331.0	333.2	337.2	337.7	330.6	321.7	329.4	328.5	336.9	331.9	329.2	328.5	327.6
1958	318.2	324.6	327.2	₄0.3	308.0	301.4	313.6	314.6	323.1	321.4	316.4	326.3	329.9
1959	332.9	328.9	333.4	332.0	325.5	326.0	335.2	334.7	340.5	337.8	334.0	334.0	332.6
1960	320.9	327.9	326.7	325.4	314.7	313.4	321.6	319.5	330.1	320.7	317.5	318.4	315.1
1961	316.4	315.2	318.8	314.8	308.2	308.7	319.5	315.6	324.6	316.6	315.3	318.6	321.4
1962	318.9	318.6	321.6	321.5	317.2	313.1	321.0	316.3	326.4	318.9	316.7	318.5	317.2
1963	307.8	308.0	312.6	310.0	308.3	308.6	308.1	308.1	314.7	308.7	307.4	306.3	304.9
1964	305.5	308.0	304.6	302.9	297.6	299.0	307.6	307.2	313.6	308.4	306.0	308.4	308.3
1965	310.0	305.6	308.2	310.1	308.1	304.0	308.4	307.7	317.5	312.3	311.1	316.2	317.1
1966	318.5	315.7	321.3	320.6	316.3	317.8	323.6	311.8	325.8	318.2	314.2	317.9	316.3
1967	303.7	310.8	310.6	304.8	298.9	298.4	303.7	294.8	305.2	300.9	301.9	307.0	307.5
1968	306.3	303.3	307.4	306.0	303.2	305.5	312.7	297.9	311.6	304.5	305.6	310.3	307.0
1969	294.4	303.7	303.0	298.6	294.2	295.5	299.3	290.1	298.9	294.6	296.2	288.8	286.4
1970	273.4	283.7	281.6	278.1	275.3	274.7	281.6	272.5	273.9	267.0	265.3	265.2	262.1
1971	257.1	259.8	258.4	255.6	255.6	258.5	263.4	248.6	262.1	254.6	253.3	257.1	256.8
1972	256.4	255.1	258.8	257.5	255.3	260.3	266.0	251.6	263.0	255.4	252.6	252.2	249.0
1973	245.8	244.1	245.4	245.8	245.9	247.8	254.2	236.8	248.0	242.4	242.1	244.7	242.4
1974	232.3	235.7	236.8	238.3	237.0	238.1	242.8	228.2	237.7	229.6	222.8	224.6	216.7
1975	212.6	206.4	201.1	198.2	200.0	206.0	216.1	207.4	219.5	219.0	222.4	226.6	226.7
1976	227.0	227.8	230.7	231.6	233.7	236.1	238.5	223.9	228.4	222.5	217.7	218.8	215.5
1977	218.4	214.9	216.7	218.4	219.5	224.0	225.3	207.2	219.7	215.3	219.6	221.5	218.8
1978	220.4	215.0	217.6	220.1	222.4	225.0	229.6	209.4	224.9	222.7	221.0	220.3	216.6
1979	208.1	212.9	212.3	213.0	211.9	216.0	219.7	191.7	210.1	207.4	206.6	205.0	201.7
1980	196.6	198.2	199.0	199.9	199.1	198.3	200.4	177.2	198.0	197.9	196.9	197.6	193.6
1981	201.1	191.8	194.5	195.1	198.6	203.0	206.0	197.6	208.2	208.4	207.6	205.0	197.2
1982	182.9	190.6	186.5	186.9	188.3	187.7	188.7	171.9	184.5	181.7	179.0	178.2	176.1
1983	173.6	169.1	168.8	170.0	170.4	173.1	176.3	163.1	179.0	179.6	179.5	179.6	174.3
1984		172.4	173.0	171.8	173.3	173.7	175.0	162.0					

PRODUCTION WORKERS AVERAGE WEEKLY EARNINGS—IN DOLLARS

1947	40.07	39.37	39.54	39.24	39.05	38.94	39.76	39.66	39.70	41.11	41.50	41.17	41.85
1948	41.11	41.90	42.17	41.88	39.78	39.31	40.92	41.03	42.18	42.19	40.85	40.34	41.85
1949	41.03	41.74	42.26	42.00	40.20	39.52	40.92	41.22	41.48	41.44	41.17	39.56	41.48
1950	43.95	42.34	43.51	43.59	41.42	41.03	43.04	44.16	45.90	45.15	45.44	45.34	46.65
1951	46.13	47.21	48.48	48.00	45.38	44.35	45.99	45.88	45.81	45.11	44.60	43.21	47.86

DEPARTMENT OF LABOR
Bureau of Labor Statistics

SIC 31—LEATHER AND LEATHER PRODUCTS

ALL EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	204.9	204.1	203.6	204.3	204.5	206.2	208.9	192.6	209.0	209.0	207.9	207.4	201.2
1984	189.4	198.6	198.3	196.2	197.0	196.4	196.9	182.2	188.6	184.3	181.7	179.6	173.3
1985	165.0	167.7	165.6	164.6	164.7	165.5	167.2	158.0	167.3	166.4	166.0	165.2	162.1
1986	151.2	157.2	156.2	154.6	153.1	152.3	151.7	141.4	150.4	149.0	149.6	149.8	148.6
1987		145.5	145.8										

WOMEN EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	121.1	120.9	119.9	120.6	120.7	121.8	123.7	113.9	123.4	123.4	123.3	123.3	118.6
1984	112.2	117.3	117.6	116.1	116.3	116.1	116.4	107.3	111.5	108.9	108.5	107.5	102.9
1985	97.9	99.1	98.3	97.5	97.5	98.0	98.5	93.6	99.8	99.2	98.8	98.4	96.6
1986	89.0	93.1	92.1	91.1	90.6	89.9	89.4	82.4	88.7	88.3	87.5	87.7	86.9
1987		85.8	86.2										

PRODUCTION WORKERS—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	171.1	169.1	168.8	170.0	170.0	172.0	174.4	160.4	175.8	175.7	174.8	174.3	168.6
1984	158.0	165.8	165.7	164.0	164.6	164.2	164.8	151.8	157.6	153.5	151.4	149.0	143.2
1985	136.7	138.1	136.5	135.5	135.6	136.9	138.8	130.3	139.6	138.7	138.4	137.8	134.3
1986	124.4	130.0	128.9	127.4	126.5	125.3	124.8	115.4	123.9	122.5	123.0	123.3	122.2
1987		121.0	121.4										

PRODUCTION-WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	203.87	197.62	190.99	197.78	201.85	204.79	207.90	207.38	207.00	208.88	206.83	209.13	209.63
1984	210.13	208.82	208.66	205.62	210.16	209.59	213.76	212.41	206.75	208.57	208.00	211.18	215.18
1985	216.88	211.85	207.28	212.80	215.87	218.42	221.34	219.00	216.71	219.21	216.95	219.58	221.34
1986	218.45	217.78	210.60	213.06	214.53	217.12	222.22	219.04	217.86	218.37	218.96	221.86	227.84
1987		225.29	223.57										

PRODUCTION-WORKER AVERAGE HOURLY EARNINGS—IN DOLLARS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	5.54	5.52	5.52	5.54	5.53	5.52	5.50	5.53	5.52	5.57	5.56	5.58	5.62
1984	5.71	5.69	5.67	5.68	5.68	5.68	5.67	5.71	5.68	5.73	5.73	5.77	5.80
1985	5.83	5.82	5.79	5.83	5.85	5.84	5.84	5.84	5.81	5.83	5.77	5.84	5.84
1986	5.92	5.87	5.85	5.87	5.91	5.90	5.91	5.92	5.92	5.95	5.95	5.98	5.98
1987		6.04	6.01										

PRODUCTION-WORKER AVERAGE WEEKLY HOURS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	36.8	35.8	34.6	35.7	36.5	37.1	37.8	37.5	37.5	37.5	37.2	37.3	37.3
1984	36.8	36.7	36.8	36.2	37.0	36.9	37.7	37.2	36.4	36.4	36.3	36.6	37.1
1985	37.2	36.4	35.8	36.5	36.9	37.4	37.9	37.5	37.3	37.6	37.6	37.6	37.9
1986	36.9	37.1	36.0	36.3	36.3	36.8	37.6	37.0	36.8	36.7	36.8	37.1	38.1
1987		37.3	37.2										

PRODUCTION-WORKER AVERAGE WEEKLY OVERTIME HOURS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	1.4	1.1	.9	1.1	1.1	1.4	1.6	1.2	1.6	1.7	1.6	1.6	1.8
1984	1.4	1.4	1.4	1.4	1.3	1.4	1.7	1.3	1.3	1.3	1.2	1.3	1.4
1985	1.5	1.1	1.1	1.2	1.3	1.4	1.6	1.5	1.7	1.6	1.6	1.9	1.8
1986	1.5	1.3	1.1	1.3	1.1	1.2	1.5	1.3	1.5	1.8	1.8	2.1	1.9
1987		1.7	1.7										

SIC 311—LEATHER TANNING AND FINISHING

ALL EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	18.6	18.3	18.5	18.6	18.8	19.0	19.1	17.3	19.0	19.0	18.7	18.5	18.1
1984	16.6	17.7	17.5	17.3	17.4	17.4	17.2	15.9	16.1	16.0	15.7	15.6	15.4
1985	14.8	14.9	14.8	15.3	15.2	15.3	15.4	14.4	14.7	14.7	14.5	14.4	14.1
1986	14.0	13.9	14.0	14.0	14.2	14.3	14.5	13.5	13.8	13.8	13.8	13.8	13.8
1987		13.8	13.6										

See footnotes at end of table.

SIC 311—LEATHER TANNING AND FINISHING (Con.)

WOMEN EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	2.7	2.6	2.6	2.6	2.7	2.7	2.8	2.4	2.7	2.7	2.7	2.7	2.7
1984	2.6	2.6	2.7	2.7	2.7	2.7	2.6	2.4	2.6	2.4	2.5	2.4	2.4
1985	2.3	2.3	2.2	2.4	2.4	2.4	2.4	2.2	2.4	2.3	2.3	2.3	2.3
1986	2.3	2.3	2.3	2.3	2.4	2.5	2.5	2.1	2.3	2.3	2.3	2.3	2.3
1987		2.4	2.3										

PRODUCTION WORKERS—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	15.5	15.1	15.2	15.4	15.6	15.9	16.0	14.3	15.9	15.8	15.6	15.5	15.2
1984	13.8	14.8	14.6	14.3	14.4	14.5	14.4	13.2	13.4	13.2	13.0	12.9	12.7
1985	12.2	12.1	12.1	12.4	12.4	12.5	12.8	11.7	12.1	12.2	12.1	12.0	11.7
1986	11.6	11.6	11.8	11.7	11.8	11.8	12.1	11.2	11.6	11.5	11.5	11.5	11.5
1987		11.3	11.2										

PRODUCTION-WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	297.60	290.72	287.51	298.40	303.69	305.66	305.93	300.70	295.66	301.73	292.59	295.02	295.37
1984	294.23	284.10	289.93	290.82	295.80	297.65	302.13	290.90	288.67	288.51	286.94	300.75	312.33
1985	310.90	304.94	305.60	310.54	316.06	318.78	323.89	305.29	312.12	310.90	307.76	304.88	308.92
1986	310.64	302.65	306.41	308.86	311.30	318.84	312.98	302.08	306.48	308.33	306.83	320.25	325.89
1987		322.32	334.82										

PRODUCTION-WORKER AVERAGE HOURLY EARNINGS—IN DOLLARS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	7.44	7.36	7.41	7.46	7.48	7.51	7.48	7.48	7.41	7.45	7.37	7.45	7.44
1984	7.43	7.36	7.34	7.40	7.34	7.46	7.46	7.44	7.44	7.36	7.32	7.50	7.75
1985	7.62	7.72	7.64	7.63	7.69	7.70	7.73	7.69	7.65	7.62	7.47	7.40	7.48
1986	7.67	7.51	7.51	7.57	7.63	7.72	7.69	7.59	7.72	7.67	7.69	7.83	7.91
1987		7.90	8.01										

PRODUCTION-WORKER AVERAGE WEEKLY HOURS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	40.0	39.5	38.8	40.0	40.6	40.7	40.9	40.2	39.9	40.5	39.7	39.6	39.7
1984	39.6	38.6	39.5	39.3	40.3	39.9	40.5	39.1	38.8	39.2	39.2	40.1	40.3
1985	40.8	39.5	40.0	40.7	41.1	41.4	41.9	39.7	40.8	40.8	41.2	41.2	41.3
1986	40.5	40.3	40.8	40.8	40.8	41.3	40.7	39.8	39.7	40.2	39.9	40.9	41.2
1987		40.8	41.8										

PRODUCTION-WORKER AVERAGE WEEKLY OVERTIME HOURS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	3.2	3.0	2.7	3.2	3.3	3.5	3.7	3.0	3.4	3.5	3.1	3.1	3.0
1984	2.8	2.5	2.6	2.7	3.0	3.0	3.4	2.1	2.6	2.5	2.6	2.9	3.0
1985	3.3	2.8	2.7	3.2	3.4	3.7	3.7	3.0	3.2	3.4	3.6	3.4	3.8
1986	3.3	3.4	3.3	3.5	3.6	3.6	3.5	2.5	2.9	2.9	3.0	3.4	3.7
1987		3.5	4.3										

SIC 314—FOOTWEAR, EXCEPT RUBBER

ALL EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	126.0	128.4	127.5	126.9	127.0	128.3	129.1	116.9	127.6	126.9	125.6	125.5	122.2
1984	114.7	122.0	120.9	119.6	119.7	119.9	119.7	110.1	113.8	110.3	108.4	107.6	104.4
1985	99.3	101.6	100.2	98.4	98.7	100.5	101.2	94.9	101.1	99.3	98.8	98.7	98.0
1986	89.7	94.9	93.8	92.6	91.7	91.2	90.0	83.9	89.6	87.5	87.0	87.3	86.4
1987		84.7	84.7										

WOMEN EMPLOYEES—IN THOUSANDS

Year	Ann Avg	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1983	82.7	84.7	83.5	83.3	83.2	84.5	84.8	76.6	83.6	83.0	82.5	82.7	80.3
1984	74.9	80.0	79.4	78.2	78.2	78.3	78.2	71.8	73.9	71.3	71.0	70.6	68.3
1985	64.3	66.2	65.3	63.9	64.0	65.0	65.4	61.8	65.2	64.0	63.7	63.4	63.4
1986	57.6	61.2	60.5	59.6	59.3	58.9	58.1	54.0	57.6	56.5	55.2	55.6	55.1
1987		54.5	54.8										

DEPARTMENT OF LABOR
Bureau of Labor Statistics

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HOUSEHOLD DATA
HISTORICAL

A-1. Employment status of the noninstitutional population 16 years and over, 1953 to date

(Numbers in thousands)

Year and month	Noninstitutional population	Labor force									Not in labor force
		Number	Percent of population	Employed					Unemployed		
				Total	Resident Armed Forces	Civilian			Number	Percent of labor force	
						Total	Agriculture	Nonagricultural industries			
	Annual averages										
1953[1]	109,287	65,246	59.7	63,410	2,231	61,179	6,260	54,919	1,834	2.8	44,041
1954	110,463	65,785	59.6	62,251	2,142	60,109	6,205	53,904	3,532	5.4	44,678
1955	111,747	67,087	60.0	64,234	2,064	62,170	6,450	55,722	2,852	4.3	44,660
1956	112,919	68,517	60.7	65,764	1,965	63,799	6,283	57,514	2,750	4.0	44,402
1957	114,213	68,877	60.3	66,019	1,948	64,071	5,947	58,123	2,859	4.2	45,336
1958	115,574	69,486	60.1	64,883	1,847	63,036	5,586	57,450	4,602	6.6	46,088
1959	117,117	70,157	59.9	66,418	1,788	64,630	5,565	59,065	3,740	5.3	46,960
1960[1]	119,106	71,489	60.0	67,639	1,861	65,778	5,458	60,318	3,852	5.4	47,617
1961	120,671	72,359	60.0	67,646	1,900	65,746	5,200	60,546	4,714	6.5	48,312
1962[1]	122,214	72,675	59.5	68,763	2,061	66,702	4,944	61,759	3,911	5.4	49,539
1963	124,422	73,839	59.3	69,768	2,006	67,762	4,687	63,076	4,070	5.5	50,583
1964	126,503	75,109	59.4	71,323	2,018	69,305	4,523	64,782	3,786	5.0	51,394
1965	128,459	76,401	59.5	73,034	1,946	71,088	4,361	66,726	3,366	4.4	52,058
1966	130,180	77,892	59.8	75,017	2,122	72,895	3,979	68,915	2,875	3.7	52,288
1967	132,092	79,565	60.2	76,590	2,218	74,372	3,844	70,527	2,975	3.7	52,527
1968	134,281	80,990	60.3	78,173	2,253	75,920	3,817	72,103	2,817	3.5	53,291
1969	136,573	82,972	60.8	80,140	2,238	77,902	3,606	74,296	2,832	3.4	53,602
1970	139,203	84,889	61.0	80,796	2,118	78,678	3,463	75,215	4,093	4.8	54,315
1971	142,189	86,355	60.7	81,340	1,973	79,367	3,394	75,972	5,016	5.8	55,834
1972[1]	145,939	88,847	60.9	83,966	1,813	82,153	3,484	78,669	4,882	5.5	57,091
1973[1]	148,670	91,203	61.3	86,838	1,774	85,064	3,470	81,594	4,365	4.8	57,467
1974	151,841	93,670	61.7	88,515	1,721	86,794	3,515	83,279	5,156	5.5	58,171
1975	154,831	95,453	61.6	87,524	1,678	85,846	3,408	82,438	7,929	8.3	59,377
1976	157,818	97,826	62.0	90,420	1,668	88,752	3,331	85,421	7,406	7.6	59,991
1977	160,689	100,665	62.6	93,673	1,656	92,017	3,283	88,734	6,991	6.9	60,025
1978[1]	163,541	103,882	63.5	97,679	1,631	96,048	3,387	92,661	6,202	6.0	59,659
1979	166,460	106,559	64.0	100,421	1,597	98,824	3,347	95,477	6,137	5.8	59,900
1980	169,349	108,544	64.1	100,907	1,604	99,303	3,364	95,938	7,637	7.0	60,806
1981	171,775	110,315	64.2	102,042	1,645	100,397	3,368	97,030	8,273	7.5	61,460
1982	173,939	111,872	64.3	101,194	1,668	99,526	3,401	96,125	10,678	9.5	62,067
1983	175,891	113,226	64.4	102,510	1,676	100,834	3,383	97,450	10,717	9.5	62,665
1984	178,080	115,241	64.7	106,702	1,697	105,005	3,321	101,685	8,539	7.4	62,839
1985	179,912	117,167	65.1	108,856	1,706	107,150	3,179	103,971	8,312	7.1	62,744
1986[1]	182,293	119,540	65.6	111,303	1,706	109,597	3,163	106,434	8,237	6.9	62,752
	Monthly data, seasonally adjusted[2]										
1986:											
November	183,114	120,426	65.8	112,183	1,751	110,432	3,215	107,217	8,243	6.8	62,688
December	183,297	120,336	65.7	112,387	1,750	110,637	3,161	107,476	7,949	6.6	62,961
1987:											
January	183,575	120,782	65.8	112,759	1,748	111,011	3,145	107,866	8,023	6.6	62,793
February	183,738	121,089	65.9	113,122	1,740	111,382	3,236	108,146	7,967	6.6	62,649
March	183,915	120,958	65.8	113,104	1,736	111,368	3,284	108,084	7,854	6.5	62,957
April	184,079	121,070	65.8	113,570	1,735	111,835	3,290	108,545	7,500	6.2	63,009
May	184,259	121,719	66.1	114,173	1,726	112,447	3,335	109,112	7,546	6.2	62,540
June	184,421	121,235	65.7	113,975	1,718	112,257	3,178	109,079	7,260	6.0	63,187
July	184,605	121,672	65.9	114,447	1,720	112,727	3,219	109,508	7,224	5.9	62,933
August	184,738	122,038	66.1	114,817	1,736	113,081	3,092	109,989	7,221	5.9	62,700
September	184,904	121,804	65.8	114,515	1,743	112,772	3,170	109,602	7,089	5.8	63,300
October	185,052	122,102	66.0	114,928	1,741	113,187	3,283	109,903	7,174	5.9	62,950
November	185,225	122,371	66.1	115,255	1,755	113,500	3,167	110,333	7,116	5.8	62,854

[1] Not strictly comparable with prior years. For an explanation, see "Historical Comparability" under the Household Data section of the Explanatory Notes.

[2] The population and Armed Forces figures are not adjusted for seasonal variation.

NOTE: Revisions of seasonally adjusted monthly and quarterly data (shown in tables A-1 through A-3 and A-32 through A-53) for the most recent 5-year period are made at the end of each calendar year.

6 DEPARTMENT OF LABOR
Bureau of Labor Statistics

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Producer Price Index

Farm products

BASE 1967 = 100

	ANN AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1913	43.7	42.6	42.5	42.6	42.5	42.2	42.7	43.8	44.2	45.5	45.6	45.8	44.9
1914	43.5	44.6	44.3	44.1	43.7	43.7	43.8	43.7	44.3	43.5	41.7	42.7	42.1
1915	43.7	43.8	44.5	43.5	44.0	44.2	43.0	43.8	43.4	42.3	43.9	43.7	44.6
1916	51.7	47.0	47.0	47.0	47.6	47.9	47.8	49.1	52.7	54.8	57.4	61.3	60.6
1917	78.9	63.5	65.9	69.3	76.5	81.5	81.9	82.4	83.9	83.1	85.3	87.3	86.3
1918	90.6	89.7	90.0	90.3	88.7	85.8	85.8	89.7	93.6	96.0	92.7	92.0	92.4
1919	96.4	94.2	90.8	93.2	96.9	99.1	95.9	100.6	100.0	93.7	93.4	97.6	101.2
1920	92.2	104.1	99.9	100.6	103.1	103.8	102.4	98.1	91.7	88.1	78.1	72.6	64.0
1921	54.1	62.1	56.7	55.0	50.6	50.9	49.2	52.9	54.5	54.9	54.9	53.6	53.8
1922	57.4	53.9	58.2	57.2	56.6	57.7	56.7	58.5	55.8	56.5	57.6	59.8	60.7
1923	60.4	60.9	61.2	61.3	60.2	59.2	58.7	57.5	58.6	61.2	61.6	62.3	61.8
1924	61.1	62.0	60.5	58.6	59.5	58.2	57.7	60.4	62.4	61.4	63.1	63.4	66.2
1925	67.1	69.6	68.8	69.0	65.8	65.6	66.9	68.5	68.2	67.2	65.5	66.1	64.5
1926	61.3	65.7	64.3	62.2	62.9	62.6	61.7	60.4	59.5	60.8	59.9	57.9	58.1
1927	60.8	59.0	58.4	57.6	57.7	58.9	59.0	59.7	62.5	64.7	64.3	63.8	63.8
1928	64.8	64.9	64.0	63.3	65.8	67.1	65.3	66.4	65.4	66.6	63.3	62.2	63.4
1929	64.1	64.8	64.5	65.6	64.2	62.5	63.2	65.8	65.8	65.3	63.6	61.9	62.3
1930	54.2	61.8	59.9	57.9	58.6	56.9	54.5	50.9	51.9	52.2	50.5	48.5	46.0
1931	39.7	44.6	42.8	43.1	42.8	41.0	40.1	39.7	38.9	37.0	35.9	35.9	34.1
1932	29.5	32.3	31.0	30.7	30.1	28.6	28.0	29.4	30.0	30.1	28.7	28.6	27.0
1933	31.4	26.1	25.0	26.2	27.2	30.7	32.5	36.8	35.3	34.9	34.1	34.6	33.9
1934	40.0	35.9	37.5	37.5	36.5	36.5	38.7	39.4	42.7	44.9	43.1	43.2	44.0
1935	48.1	47.4	48.4	47.8	49.1	49.2	47.9	47.2	48.5	48.6	47.8	47.4	47.9
1936	49.5	47.8	48.6	46.7	47.0	46.0	47.7	49.7	51.3	51.4	51.4	52.2	54.2
1937	52.9	55.9	56.0	57.6	56.4	54.9	54.1	54.7	52.9	52.6	49.1	46.3	44.5
1938	42.0	43.8	42.7	43.0	41.8	41.3	42.0	42.5	41.1	41.6	40.8	41.5	41.3
1939	40.0	41.1	41.0	40.3	39.0	39.0	38.1	38.3	37.3	42.0	41.0	41.1	41.4
1940	41.4	42.2	42.0	41.5	42.5	41.5	40.5	40.7	40.1	40.5	40.6	41.7	42.6
1941	50.3	43.8	43.0	43.8	45.5	46.7	50.2	52.5	53.5	55.8	55.1	55.4	57.9
1942	64.8	61.7	62.0	62.9	64.0	63.8	63.8	64.4	64.9	65.9	66.7	67.6	69.6
1943	75.0	71.6	72.8	75.1	75.7	76.8	77.2	76.4	75.5	75.2	74.8	74.2	74.4
1944	75.5	74.4	74.9	75.5	75.3	75.2	76.4	75.9	75.0	75.1	75.5	76.1	76.7
1945	78.5	77.2	77.7	77.7	78.8	79.5	79.8	78.8	77.6	76.0	77.8	80.2	80.4
1946	90.9	79.3	80.0	81.5	82.7	84.1	85.8	96.0	98.4	94.4	101.1	103.8	102.8
1947	109.4	100.8	103.2	110.2	106.6	10[illegible]	106.2	107.4	108.5	112.9	114.9	115.6	121.5
1948	117.5	124.2	115.6	115.3	117.0	119.8	122.1	121.7	120.2	118.3	113.7	112.2	109.5
1949	101.6	106.2	101.8	103.4	103.4	103.4	101.3	101.0	101.0	101.3	99.3	99.2	97.8
1950	106.7	97.2	99.3	101.0	100.6	103.2	103.5	109.9	110.9	112.7	110.4	114.1	118.2
1951	124.2	123.0	128.3	128.8	128.7	126.7	124.7	121.7	120.9	120.4	122.1	122.7	121.9
1952	117.2	120.5	118.1	118.5	119.1	118.2	117.4	120.7	120.4	116.8	114.8	113.4	108.6
1953	106.2	109.0	107.2	109.2	106.5	107.1	104.4	107.2	105.5	107.4	104.3	102.6	103.4
1954	104.7	107.1	107.0	107.7	108.8	107.2	103.8	105.3	104.9	102.5	101.9	102.0	98.4
1955	98.2	101.3	101.9	100.8	103.1	99.9	100.5	98.0	96.5	97.8	95.1	92.1	90.8
1956	96.9	92.1	94.2	94.8	96.4	99.5	99.9	98.6	97.6	98.7	96.8	96.3	97.3
1957	99.5	97.8	97.2	97.2	99.2	98.0	99.5	101.6	101.8	99.6	100.2	100.6	101.4
1958	103.9	102.6	105.2	110.0	107.0	107.8	104.7	104.0	102.0	101.9	101.1	100.8	99.2
1959	97.5	100.2	99.8	99.4	101.2	99.4	98.3	96.8	95.4	97.3	94.7	93.5	94.1
1960	97.2	94.7	95.3	99.0	99.3	99.0	97.5	97.3	94.8	96.0	98.0	98.4	97.1
1961	96.3	98.2	98.6	98.4	96.9	95.1	93.2	95.4	97.0	95.5	95.4	95.9	96.2

DEPARTMENT OF LABOR
Bureau of Labor Statistics

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Farm products

BASE 1967 = 100

YR	ANN AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1962	98.0	98.2	98.5	98.7	97.2	96.5	95.6	96.8	97.9	100.9	99.0	99.6	97.6
1963	96.0	98.8	96.8	95.7	95.7	94.7	95.2	97.1	96.6	95.8	95.4	96.5	93.6
1964	94.6	96.6	94.8	95.5	94.7	94.0	93.5	94.4	93.9	96.0	94.1	94.3	93.0
1965	98.7	93.3	94.8	95.7	97.9	98.7	100.6	100.3	99.4	99.8	99.7	100.6	103.3
1966	105.9	104.8	107.7	107.1	106.7	104.8	104.5	108.1	108.4	109.0	104.7	102.8	102.1
1967	100.0	102.9	101.2	100.0	97.9	101.0	102.7	102.9	99.5	98.6	97.4	96.7	99.3
1968	102.5	99.4	101.6	102.4	102.4	104.0	102.8	104.2	101.7	103.1	101.5	103.5	103.7
1969	109.1	105.3	105.5	107.0	106.3	111.3	111.9	111.5	109.2	108.9	108.2	111.4	112.4
1970	111.0	112.9	114.0	114.6	111.6	111.3	111.6	113.4	108.5	112.1	107.8	106.9	107.1
1971	112.9	108.9	113.9	113.0	112.9	113.9	116.0	113.4	113.3	110.5	111.3	112.3	115.8
1972	125.0	117.8	120.7	119.7	119.1	122.2	124.0	128.0	128.2	128.6	125.5	128.8	137.5
1973	176.3	144.2	150.9	160.9	160.6	170.4	182.3	173.3	213.3	200.4	188.4	184.0	187.2
1974	187.7	202.6	205.6	197.0	186.2	180.8	168.6	180.8	189.2	182.7	187.5	187.8	183.7
1975	186.7	179.7	174.6	171.1	177.7	184.5	186.2	193.7	193.2	197.1	197.3	191.7	193.8
1976	191.0	192.8	190.7	186.5	192.9	192.6	196.5	196.9	189.7	191.9	186.7	183.6	191.6
1977	192.5	193.5	199.1	202.5	208.2	204.3	192.8	190.2	181.8	182.0	182.0	185.6	188.3
1978	212.5	192.2	198.9	204.2	213.7	215.8	219.5	219.9	210.3	215.1	219.4	218.2	222.7
1979	241.4	230.4	240.9	242.8	246.0	245.4	242.8	246.8	238.5	241.0	239.6	240.2	242.5
1980	249.4	236.4	242.3	239.3	228.9	233.5	233.4	254.3	263.8	267.0	263.6	264.9	265.3
1981	254.9	264.5	262.4	260.7	263.3	259.6	260.7	263.3	257.9	251.1	243.1	237.4	234.6
1982	242.4	242.2	247.1	244.7	250.6	256.5	252.7	246.6	240.8	234.5	229.2	230.7	232.6
1983	248.2	233.2	240.7	241.5	250.5	250.4	247.4	244.3	253.5	256.4	255.2	251.0	254.0
1984	255.8	263.4	261.6	267.4	265.4	260.8	257.1	258.7	253.3	249.8	240.2	245.7	245.7
1985	230.5	243.2	245.3	238.8	236.8	230.4	229.4	229.3	218.0	212.8	219.9	230.4	232.2
1986	225.2	227.4	221.8	220.2	218.6	227.0	222.6	228.6	227.0	224.1	227.4	230.1	227.4
1987	NA	220.8	222.9	223.3	231.9	242.0	239.3	236.3	231.1	232.1	229.0	NA	NA

NA NOT AVAILABLE

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SIC 20–23,26–31—NONDURABLE GOODS (Con.)

PRODUCTION WORKER AVERAGE WEEKLY OVERTIME HOURS

Year	Ann. Avg.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec.
1983	3.0	2.5	2.4	2.6	2.7	2.8	3.0	3.0	3.3	3.5	3.3	3.2	3.1
1984	3.1	3.1	3.1	3.1	3.1	3.0	3.2	3.1	3.3	3.4	3.1	3.2	3.1
1985	3.1	2.8	2.8	2.8	2.8	2.8	3.0	3.0	3.3	3.5	3.3	3.3	3.5
1986	3.3	3.2	3.0	3.2	3.1	3.2	3.2	3.3	3.6	3.7	3.5	3.6	3.6
1987		3.3	3.3										

SIC 20—FOOD AND KINDRED PRODUCTS

ALL EMPLOYEES—IN THOUSANDS

Year	Ann. Avg.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec.
1983	1,614.8	1,566.3	1,555.3	1,552.3	1,555.2	1,574.6	1,613.8	1,651.0	1,697.8	1,709.3	1,666.9	1,634.2	1,600.9
1984	1,612.2	1,568.2	1,556.9	1,552.2	1,557.8	1,574.2	1,610.3	1,659.7	1,700.6	1,693.0	1,656.2	1,620.9	1,596.9
1985	1,602.5	1,558.3	1,546.2	1,547.3	1,541.9	1,561.9	1,608.6	1,636.4	1,693.6	1,689.0	1,644.4	1,609.5	1,592.4
1986	1,616.9	1,554.5	1,552.5	1,550.9	1,549.9	1,575.3	1,624.5	1,655.4	1,705.6	1,705.9	1,664.9	1,641.4	1,621.4
1987		1,576.4	1,572.6										

WOMEN EMPLOYEES—IN THOUSANDS

Year	Ann. Avg.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec.
1983	496.7	469.3	465.5	464.3	467.9	476.4	493.8	512.2	540.6	546.6	523.6	509.8	490.1
1984	497.8	473.0	469.8	466.6	468.8	476.0	490.8	520.1	543.6	543.4	522.6	504.9	494.5
1985	497.3	473.9	469.3	470.0	468.4	475.5	495.3	510.5	542.3	541.1	520.8	504.6	496.4
1986	506.3	475.7	476.6	476.0	475.3	484.0	503.3	519.8	549.7	551.2	531.9	521.1	510.8
1987		488.7	485.5										

PRODUCTION WORKERS—IN THOUSANDS

Year	Ann. Avg.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec.
1983	1,313.7	1,066.9	1,058.7	1,055.0	1,057.8	1,075.6	1,109.6	1,145.0	1,191.4	1,203.1	1,164.8	1,133.7	1,122.8
1984	1,119.5	1,075.7	1,065.1	1,061.3	1,066.8	1,082.2	1,115.2	1,161.6	1,203.7	1,200.2	1,164.2	1,129.9	1,107.8
1985	1,118.1	1,073.1	1,063.6	1,064.2	1,061.3	1,079.4	1,122.0	1,148.5	1,204.3	1,201.3	1,161.1	1,126.7	1,112.1
1986	1,135.7	1,076.7	1,078.3	1,073.5	1,073.1	1,094.7	1,139.3	1,169.7	1,220.1	1,221.5	1,182.0	1,160.6	1,140.4
1987		1,099.3	1,095.3										

PRODUCTION WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

Year	Ann. Avg.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec.
1983	323.51	316.29	313.39	317.77	320.15	322.65	326.36	323.51	325.60	329.26	324.37	329.18	332.77
1984	333.92	330.57	326.49	328.94	332.20	333.04	336.80	331.85	334.03	336.51	331.14	338.00	343.04
1985	342.80	336.15	333.06	336.41	337.51	344.40	341.09	342.40	342.15	348.02	343.80	346.12	354.50
1986	349.60	348.33	339.69	344.36	346.90	352.08	349.60	349.52	351.60	349.46	347.60	353.36	357.86
1987		354.22	351.05										

PRODUCTION WORKER AVERAGE HOURLY EARNINGS—IN DOLLARS

Year	Ann. Avg.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec.
1983	8.19	8.11	8.14	8.19	8.23	8.21	8.20	8.19	8.14	8.15	8.15	8.25	8.34
1984	8.39	8.39	8.35	8.37	8.41	8.41	8.42	8.38	8.33	8.35	8.32	8.45	8.47
1985	8.57	8.51	8.54	8.56	8.61	8.61	8.57	8.56	8.49	8.53	8.51	8.61	8.71
1986	8.74	8.73	8.71	8.74	8.76	8.78	8.74	8.76	8.66	8.65	8.69	8.79	8.88
1987		8.90	8.91										

PRODUCTION WORKER AVERAGE WEEKLY HOURS

Year	Ann. Avg.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec.
1983	39.5	39.0	38.5	38.8	38.9	39.3	39.8	39.5	40.0	40.4	39.8	39.9	39.9
1984	39.8	39.4	39.1	39.3	39.5	39.6	40.0	39.6	40.1	40.3	39.8	40.0	40.5
1985	40.0	39.5	39.0	39.3	39.2	40.0	39.8	40.0	40.3	40.8	40.4	40.2	40.7
1986	40.0	39.9	39.0	39.4	39.6	40.1	40.0	39.9	40.6	40.4	40.0	40.2	40.9
1987		39.8	39.4										

PRODUCTION WORKER AVERAGE WEEKLY OVERTIME HOURS

Year	Ann. Avg.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec.
1983	3.6	3.2	2.9	3.1	3.1	3.2	3.5	3.8	4.2	4.5	3.9	3.7	3.6
1984	3.8	3.5	3.3	3.3	3.4	3.4	3.8	3.9	4.4	4.5	3.9	4.0	3.8
1985	3.8	3.6	3.3	3.2	3.2	3.6	3.7	4.2	4.4	4.8	4.1	4.0	4.0
1986	3.9	3.8	3.3	3.3	3.4	3.8	3.8	4.1	4.6	4.4	4.0	4.0	3.8
1987		3.6	3.4										

See footnotes at end of tables

Source Bureau of Labor Statistics

SIC 201—MEAT PRODUCTS

ALL EMPLOYEES—IN THOUSANDS

Year	Ann. Avg.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec.
1983	346.0	337.3	336.3	335.8	337.6	341.0	342.4	349.7	350.5	353.9	356.2	357.3	353.8
1984	355.5	346.3	344.3	347.1	349.5	351.6	355.5	358.6	359.1	357.9	364.6	366.8	364.5
1985	361.7	355.8	355.2	355.4	353.4	357.6	362.6	364.3	367.1	366.7	366.4	367.4	368.6
1986	371.5	360.5	361.7	362.3	359.7	367.2	372.8	376.1	376.8	378.8	379.0	382.4	380.2
1987		372.5	371.5										

WOMEN EMPLOYEES—IN THOUSANDS

Year	Ann. Avg.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec.
1983	114.8	110.8	110.4	111.0	112.4	113.5	114.2	117.0	117.4	117.9	118.0	118.6	118.1
1984	115.9	112.2	111.2	111.9	112.2	114.2	115.2	117.3	117.8	118.1	120.1	120.4	120.3
1985	120.6	116.3	116.9	118.9	117.3	119.6	120.7	121.3	123.2	123.6	123.7	123.6	123.8
1986	126.0	120.8	121.2	121.6	120.6	123.9	126.6	127.4	128.4	129.4	130.0	131.4	130.5
1987		127.6	126.9										

PRODUCTION WORKERS—IN THOUSANDS

Year	Ann. Avg.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec.
1983	288.4	279.9	278.9	278.7	280.2	283.9	285.0	292.0	292.7	295.7	298.5	299.0	296.5
1984	298.2	288.7	286.6	289.7	292.0	294.6	298.5	302.0	302.5	301.4	306.5	308.5	307.0
1985	304.8	297.6	297.3	297.8	295.8	300.5	305.3	307.2	310.2	310.4	310.6	311.5	313.0
1986	315.4	305.2	306.8	307.1	304.9	311.8	317.0	320.0	320.7	322.2	321.9	324.9	322.8
1987		314.9	313.9										

PRODUCTION WORKER AVERAGE WEEKLY EARNINGS—IN DOLLARS

Year	Ann. Avg.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec.
1983	292.00	295.23	282.75	290.68	293.70	292.39	298.75	293.33	290.33	292.47	298.29	292.53	288.95
1984	285.98	282.59	276.64	283.24	280.24	285.26	290.87	289.28	288.88	293.63	286.00	294.97	287.43
1985	285.59	280.21	270.23	274.61	273.51	290.40	287.83	290.40	289.67	298.98	292.25	291.93	289.02
1986	288.01	290.27	271.85	278.82	285.48	294.40	291.73	290.66	293.13	296.46	286.89	291.73	288.41
1987		296.00	280.77										

PRODUCTION WORKER AVERAGE HOURLY EARNINGS—IN DOLLARS

Year	Ann. Avg.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec.
1983	7.43	7.57	7.54	7.55	7.55	7.44	7.45	7.37	7.35	7.33	7.28	7.35	7.39
1984	7.24	7.34	7.28	7.30	7.26	7.24	7.28	7.25	7.24	7.25	7.15	7.16	7.15
1985	7.23	7.13	7.13	7.17	7.16	7.26	7.25	7.26	7.26	7.31	7.27	7.28	7.28
1986	7.31	7.33	7.23	7.28	7.32	7.36	7.33	7.34	7.31	7.32	7.30	7.33	7.32
1987		7.40	7.35										

PRODUCTION WORKER AVERAGE WEEKLY HOURS

Year	Ann. Avg.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec.
1983	39.3	39.0	37.5	38.5	38.9	39.3	40.1	39.8	39.5	39.9	39.6	39.8	39.1
1984	39.5	38.5	38.0	38.8	38.6	39.4	39.9	39.9	39.9	40.5	40.0	39.8	40.2
1985	39.5	39.3	37.9	38.3	38.2	40.0	39.7	40.0	39.9	40.9	40.2	40.1	39.7
1986	39.4	39.6	37.6	38.3	39.0	40.0	39.8	39.6	40.1	40.5	39.3	39.8	39.4
1987		40.0	38.2										

PRODUCTION WORKER AVERAGE WEEKLY OVERTIME HOURS

Year	Ann. Avg.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec.
1983	3.5	3.2	2.6	3.0	3.2	3.4	3.8	3.5	3.6	3.9	3.9	3.9	3.7
1984	3.5	3.0	2.8	3.2	3.0	3.3	3.6	3.6	3.6	4.2	3.6	3.9	3.8
1985	3.5	3.3	2.7	2.6	2.6	3.6	3.6	3.8	3.8	4.4	3.8	4.1	3.6
1986	3.6	3.5	2.7	2.7	3.1	3.9	3.8	3.9	4.0	4.1	3.6	3.9	3.5
1987		3.8	2.9										

SIC 2011—MEAT PACKING PLANTS

ALL EMPLOYEES—IN THOUSANDS

Year	Ann. Avg.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	Oct	Nov	Dec.
1983	143.4	142.2	141.0	140.2	140.1	141.3	138.6	143.2	143.7	146.6	148.0	148.6	147.6
1984	144.5	145.5	143.1	145.0	144.9	144.2	145.0	144.6	142.8	143.2	145.4	146.2	144.4
1985	140.3	142.9	140.8	140.2	138.3	138.8	140.2	140.2	141.8	139.9	139.4	140.1	141.2
1986	138.3	138.6	137.3	137.0	135.8	137.2	138.2	138.8	138.8	139.2	138.3	140.8	139.7
1987		136.2	135.0										

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SIC 20-23,26-31—NONDURABLE GOODS (Con.)

PRODUCTION-WORKER AVERAGE WEEKLY HOURS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1932	41.9	42.0	43.0	42.7	41.3	40.0	40.3	38.0	40.7	43.5	43.7	42.3	42.1
1933	40.0	41.3	42.0	40.3	41.3	43.3	44.9	44.4	38.7	37.0	36.3	35.0	34.9
1934	35.1	34.5	36.2	36.2	35.9	35.4	34.5	34.1	34.6	34.6	34.9	34.5	35.5
1935	36.1	35.4	36.0	36.1	35.5	35.1	35.0	35.5	36.4	37.0	37.2	36.4	37.5
1936	37.7	36.8	37.0	37.5	36.8	37.1	37.2	37.3	38.5	37.5	38.7	38.5	39.5
1937	37.4	38.7	38.3	39.6	38.7	38.2	37.7	37.3	37.3	36.3	36.2	34.7	34.7
1938	36.1	34.3	35.5	35.6	35.0	35.1	35.0	36.1	37.0	37.6	37.6	36.5	37.5
1939	37.4	37.0	37.5	37.8	36.7	36.8	37.3	37.1	37.8	37.7	38.2	37.7	37.7
1940	37.0	36.8	36.8	37.0	36.3	36.4	36.4	36.6	37.2	37.6	37.6	37.8	38.3
1941	38.9	37.3	38.4	38.9	38.5	39.0	39.4	39.0	39.5	39.6	39.2	38.7	39.6
1942	40.3	38.2	39.9	40.1	40.0	40.1	39.9	39.8	40.2	39.7	40.0	41.3	42.1
1943	42.5	41.8	42.0	42.3	42.5	42.8	42.7	42.2	42.6	42.2	42.7	43.1	42.8
1944	43.1	43.0	43.2	43.2	42.5	43.2	43.3	43.0	43.0	43.0	43.3	43.2	43.5
1945	42.3	43.4	43.4	43.5	43.2	42.3	43.1	42.8	40.3	41.8	41.5	41.3	41.5
1946	40.5	41.2	40.9	40.9	40.6	40.1	40.2	40.1	40.4	40.3	40.2	40.3	41.1
1947	40.2	40.6	40.4	40.1	39.7	39.8	39.9	39.9	39.9	40.4	40.4	40.3	40.9
1948	39.6	40.2	39.9	39.9	39.7	39.8	39.7	39.6	39.7	39.2	39.2	39.2	39.4
1949	38.9	38.7	38.8	38.6	37.7	38.1	38.5	38.8	39.0	39.6	39.6	39.3	39.6
1950	39.7	39.4	39.3	39.3	38.6	38.9	39.5	39.9	40.5	40.2	40.3	40.3	40.5
1951	40.5	40.2	40.0	40.0	39.6	39.3	39.4	39.4	39.2	39.5	39.8	39.2	39.8
1952	39.7	39.4	39.4	39.3	38.5	38.8	39.6	39.5	40.0	40.4	40.3	40.2	40.6
1953	39.6	39.8	39.8	40.0	39.5	39.6	39.7	39.7	39.6	39.1	39.3	39.2	39.3
1954	39.0	38.6	38.8	38.8	38.1	38.6	39.0	39.1	39.3	39.4	39.3	39.5	39.9
1955	39.9	39.4	39.5	39.7	38.8	39.6	40.0	39.8	40.0	40.2	40.4	40.3	40.5
1956	39.6	39.9	39.8	39.6	39.2	39.1	39.3	39.4	39.6	39.8	39.8	39.6	39.8
1957	39.2	39.2	39.3	39.1	38.9	38.9	39.3	39.5	39.6	39.7	39.1	38.8	39.0
1958	38.8	38.4	38.2	38.1	37.8	38.2	38.7	39.0	39.4	39.5	39.4	39.5	39.6
1959	39.7	39.4	39.4	39.5	39.0	39.0	39.9	40.1	39.9	39.6	39.7	39.5	39.9
1960	39.2	39.4	39.1	38.9	38.7	39.5	39.6	39.7	39.6	39.2	39.2	38.9	39.1
1961	39.3	39.5	39.5	39.7	39.7	39.0	39.6	39.7	39.8	39.4	39.7	39.5	39.8
1962	39.7	39.8	39.2	39.6	39.6	39.8	40.1	40.0	39.9	40.0	39.5	39.6	39.7
1963	39.6	39.2	39.2	39.4	38.9	39.6	39.9	39.8	40.0	40.0	39.9	39.6	39.9
1964	39.7	39.8	39.4	39.5	39.5	39.8	39.9	39.9	40.1	39.6	40.0	39.9	40.2
1965	40.1	39.7	39.8	40.0	39.4	40.0	40.2	40.2	40.3	40.2	40.2	40.3	40.4
1966	40.2	39.8	40.2	40.2	39.9	40.3	40.5	40.3	40.5	40.3	40.3	40.2	40.1
1967	39.7	39.7	39.2	39.4	39.3	39.5	39.7	39.7	40.0	40.2	39.9	40.1	40.1
1968	39.8	39.9	39.7	39.7	39.8	39.8	40.1	40.0	40.2	40.3	40.1	39.9	40.1
1969	39.7	39.4	39.9	39.7	39.4	39.7	40.0	39.8	39.9	40.0	39.7	39.8	40.0
1970	39.1	39.2	39.1	39.2	39.0	39.0	39.2	39.3	39.3	38.9	39.0	39.1	39.3
1971	39.3	38.9	38.7	38.9	38.9	39.2	39.5	39.4	39.6	39.5	39.4	39.6	39.8
1972	39.7	39.1	39.3	39.5	39.6	39.5	39.9	39.8	40.0	40.1	39.8	39.9	39.9
1973	39.6	39.6	39.3	39.4	39.5	39.5	39.7	39.6	39.8	40.0	39.6	39.9	40.0
1974	39.1	39.2	39.2	39.3	38.4	39.3	39.5	39.3	39.5	39.3	39.0	39.6	39.8
1975	38.8	37.6	37.4	37.7	37.5	38.3	38.9	38.9	39.5	39.8	39.6	39.7	40.1
1976	39.4	39.5	39.4	39.4	38.6	39.4	39.5	39.4	39.4	39.5	39.3	39.5	39.7
1977	39.4	39.4	39.2	39.3	39.1	39.3	39.8	39.3	39.6	39.6	39.6	39.7	39.9
1978	39.4	39.2	39.7	39.4	39.4	39.3	39.6	39.4	39.6	39.7	25.5	39.7	39.9
1979	39.3	38.9	38.9	39.3	39.2	39.1	39.4	39.3	39.4	39.4	39.4	39.6	39.9
1980	39.0	39.0	38.9	39.0	38.7	38.8	38.8	38.5	39.0	39.1	39.1	39.4	39.8
1981	39.1	39.2	38.9	39.1	38.9	39.4	39.4	39.5	39.1	39.4	39.1	39.1	39.2
1982	38.4	38.2	38.6	38.3	38.0	38.4	38.7	38.5	38.7	38.8	38.6	38.8	38.1
1983	39.4	39.6	39.2	38.9	39.1	39.3	39.7	39.4	39.7	40.1	39.9	40.0	40.1
1984		39.5	39.8	39.6	39.8	39.6	39.8	39.4					

See footnotes at end of tables.

SIC 20-23,26-31—NONDURABLE GOODS (Con.)

PRODUCTION-WORKER AVERAGE WEEKLY OVERTIME HOURS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1956	2.4	2.6	2.4	2.4	2.2	2.2	2.3	2.4	2.4	2.6	2.6	2.6	2.5
1957	2.3	2.2	2.2	2.2	2.1	2.1	2.3	2.4	2.4	2.5	2.3	2.3	2.1
1958	2.2	1.9	1.9	1.9	1.8	1.9	2.1	2.2	2.4	2.6	2.5	2.6	2.6
1959	2.7	2.4	2.5	2.6	2.6	2.7	2.7	2.8	2.9	3.1	2.8	2.7	2.7
1960	2.5	2.6	2.5	2.5	2.3	2.5	2.6	2.6	2.6	2.6	2.5	2.4	2.2
1961	2.5	2.1	2.1	2.2	2.2	2.3	2.6	2.6	2.7	2.8	2.8	2.8	2.7
1962	2.7	2.5	2.5	2.6	2.6	2.7	2.8	2.8	2.7	2.9	2.7	2.7	2.7
1963	2.7	2.4	2.5	2.6	2.4	2.6	2.8	2.8	2.8	3.0	2.9	2.8	2.8
1964	2.9	2.6	2.6	2.6	2.7	2.8	2.9	2.9	3.1	3.3	3.1	3.0	3.1
1965	3.2	2.8	2.9	3.0	2.7	3.0	3.2	3.1	3.2	3.5	3.4	3.4	3.4
1966	3.4	3.1	3.3	3.3	3.3	3.3	3.4	3.5	3.5	3.5	3.6	3.4	3.3
1967	3.1	3.0	2.9	3.0	2.9	3.0	3.1	3.1	3.3	3.6	3.4	3.3	3.3
1968	3.3	3.0	3.1	3.1	2.7	3.2	3.4	3.4	3.5	3.8	3.5	3.5	3.5
1969	3.4	3.3	3.0	3.3	3.2	3.3	3.4	3.4	3.5	3.7	3.5	3.4	3.4
1970	3.0	3.1	3.0	2.5	2.8	2.9	3.0	2.9	3.1	3.1	3.0	2.9	2.9
1971	3.0	2.8	2.7	2.7	2.7	2.9	3.1	3.0	3.2	3.4	3.2	3.1	3.1
1972	3.3	3.0	3.0	3.1	3.2	3.1	3.4	3.3	3.5	3.7	3.6	3.5	3.5
1973	3.4	3.2	3.2	3.3	3.3	3.3	3.4	3.4	3.6	3.8	3.6	3.6	3.5
1974	3.0	3.2	3.1	3.1	2.6	3.1	3.3	3.2	3.3	3.3	3.0	2.7	2.5
1975	2.7	2.2	2.1	2.2	2.2	2.4	2.7	2.8	3.2	3.4	3.2	3.2	3.2
1976	3.0	3.0	3.0	3.0	2.5	3.0	3.1	3.0	3.1	3.4	3.3	3.1	3.1
1977	3.2	2.9	2.9	3.0	3.0	3.1	3.2	3.1	3.3	3.5	3.3	3.3	3.3
1978	3.2	3.0	3.1	3.1	3.1	3.1	3.2	3.2	3.4	3.6	3.4	3.3	3.2
1979	3.1	3.0	3.0	3.1	2.5	2.9	3.0	3.0	3.2	3.4	3.2	3.2	3.2
1980	2.8	2.9	2.7	2.9	2.7	2.5	2.5	2.6	2.9	3.1	2.9	3.0	3.1
1981	2.8	2.9	2.8	2.7	2.5	2.8	2.8	2.8	3.0	3.0	3.0	2.7	2.6
1982	2.5	2.4	2.5	2.4	2.3	2.4	2.5	2.5	2.7	2.9	2.7	2.6	2.6
1983	3.0	2.5	2.4	2.6	2.7	2.8	3.0	3.0	3.3	3.5	3.3	3.2	3.3
1984		3.1	3.1	3.1	3.1	3.0	3.3	3.1					

SIC 20—FOOD AND KINDRED PRODUCTS

ALL EMPLOYEES—IN THOUSANDS

1938	1,383	1,296	1,273	1,284	1,304	1,332	1,381	1,447	1,546	1,584	1,495	1,413	1,372
1940	1,414	1,322	1,317	1,317	1,327	1,345	1,405	1,455	1,543	1,561	1,513	1,442	1,421
1941	1,514	1,357	1,344	1,355	1,387	1,425	1,490	1,560	1,699	1,731	1,654	1,597	1,550
1942	1,617	1,515	1,501	1,485	1,497	1,519	1,567	1,676	1,756	1,856	1,735	1,666	1,626
1943	1,649	1,584	1,558	1,559	1,547	1,565	1,618	1,698	1,790	1,797	1,729	1,681	1,656
1944	1,685	1,622	1,615	1,609	1,613	1,626	1,668	1,750	1,784	1,793	1,742	1,708	1,688
1945	1,691	1,651	1,643	1,628	1,632	1,638	1,663	1,721	1,734	1,808	1,746	1,719	1,713
1946	1,767	1,701	1,707	1,707	1,707	1,708	1,720	1,814	1,884	1,886	1,783	1,803	1,771
1947	1,790	1,706	1,663	1,655	1,667	1,686	1,744	1,866	2,005	2,046	1,912	1,841	1,794
1948	1,801	1,722	1,695	1,683	1,597	1,652	1,800	1,913	1,980	2,061	1,927	1,823	1,760
1949	1,778	1,680	1,652	1,650	1,660	1,683	1,764	1,852	1,904	1,978	1,862	1,786	1,732
1950	1,790	1,666	1,641	1,653	1,671	1,707	1,771	1,877	1,987	2,007	1,901	1,824	1,774
1951	1,823.2	1,739.2	1,716.0	1,716.1	1,714.7	1,740.7	1,811.6	1,898.9	1,988.7	2,017.2	1,931.3	1,826.9	1,777.0
1952	1,827.8	1,716.8	1,712.8	1,706.9	1,718.8	1,738.7	1,819.2	1,915.3	1,982.4	2,034.2	1,938.4	1,850.0	1,789.9
1953	1,838.9	1,737.7	1,722.2	1,714.9	1,725.3	1,760.1	1,821.2	1,923.0	2,012.7	2,051.1	1,943.6	1,863.6	1,798.8
1954	1,818.3	1,728.5	1,711.4	1,714.0	1,723.2	1,751.7	1,810.2	1,888.3	1,972.7	2,002.1	1,908.3	1,830.2	1,777.6
1955	1,824.7	1,715.6	1,694.1	1,704.9	1,720.7	1,761.7	1,824.6	1,897.6	1,995.7	1,994.2	1,926.4	1,863.6	1,798.7
1956	1,841.9	1,732.5	1,723.6	1,732.2	1,740.5	1,778.9	1,845.6	1,905.1	2,005.2	2,037.3	1,950.5	1,858.9	1,802.2
1957	1,805.4	1,736.2	1,710.1	1,712.6	1,718.2	1,741.2	1,802.8	1,874.6	1,952.7	1,971.6	1,881.1	1,811.9	1,761.4
1958	1,772.8	1,703.5	1,661.7	1,668.4	1,676.8	1,707.5	1,778.1	1,824.8	1,918.0	1,923.1	1,858.0	1,791.0	1,741.3

BEST AVAILABLE COPY

SIC 20—FOOD AND KINDRED PRODUCTS (Con.)

ALL EMPLOYEES—IN THOUSANDS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1959	1,709.6	1,702.3	1,699.5	1,698.8	1,706.8	1,729.2	1,797.8	1,837.9	1,953.3	1,944.5	1,859.9	1,806.7	1,758.6
1960	1,708.0	1,713.3	1,692.5	1,688.6	1,716.4	1,727.4	1,786.5	1,841.4	1,920.0	1,947.7	1,889.3	1,804.8	1,752.1
1961	1,775.2	1,700.1	1,681.4	1,688.6	1,696.5	1,707.4	1,772.1	1,819.6	1,908.9	1,918.4	1,867.0	1,801.8	1,740.8
1962	1,763.0	1,685.6	1,664.4	1,662.4	1,690.0	1,701.2	1,766.6	1,817.3	1,899.2	1,917.9	1,848.7	1,771.0	1,731.5
1963	1,752.0	1,680.3	1,658.5	1,667.0	1,668.2	1,686.9	1,739.9	1,791.1	1,884.2	1,895.7	1,852.2	1,771.5	1,729.2
1964	1,750.4	1,679.0	1,663.7	1,657.2	1,668.5	1,685.7	1,736.4	1,785.8	1,878.4	1,886.0	1,836.7	1,783.7	1,743.2
1965	1,756.7	1,691.0	1,667.8	1,666.7	1,663.5	1,686.6	1,741.2	1,796.8	1,877.7	1,881.6	1,847.7	1,807.3	1,750.5
1966	1,777.2	1,708.2	1,686.1	1,681.7	1,693.8	1,708.6	1,769.4	1,824.3	1,919.1	1,901.4	1,855.0	1,813.7	1,770.7
1967	1,788.3	1,719.9	1,701.9	1,707.1	1,707.7	1,726.5	1,788.3	1,829.4	1,880.3	1,919.9	1,871.9	1,810.6	1,770.9
1968	1,795.5	1,706.1	1,685.0	1,689.8	1,708.2	1,711.4	1,787.8	1,819.2	1,918.5	1,913.5	1,886.9	1,803.6	1,775.5
1969	1,798.8	1,718.6	1,709.8	1,707.2	1,710.7	1,723.5	1,783.9	1,827.4	1,935.6	1,921.3	1,853.1	1,820.2	1,778.1
1970	1,788.2	1,730.6	1,726.8	1,723.2	1,711.4	1,726.6	1,786.7	1,817.3	1,915.5	1,889.5	1,844.1	1,794.8	1,757.8
1971	1,765.6	1,706.0	1,683.1	1,689.2	1,684.9	1,704.6	1,760.9	1,810.5	1,887.9	1,894.5	1,816.0	1,782.9	1,744.1
1972	1,745.2	1,694.5	1,675.1	1,681.7	1,675.2	1,689.5	1,760.9	1,785.2	1,862.2	1,858.5	1,802.8	1,747.1	1,707.1
1973	1,714.8	1,680.9	1,653.6	1,658.5	1,641.2	1,651.1	1,705.3	1,737.9	1,810.5	1,820.9	1,786.2	1,748.6	1,710.5
1974	1,706.7	1,686.0	1,648.9	1,680.9	1,642.9	1,658.8	1,695.9	1,722.4	1,821.6	1,828.4	1,767.2	1,707.0	1,659.9
1975	1,657.5	1,593.6	1,570.8	1,575.1	1,572.3	1,593.3	1,643.0	1,661.2	1,780.0	1,790.7	1,741.8	1,692.3	1,655.3
1976	1,688.9	1,619.0	1,614.5	1,665.1	1,612.0	1,636.9	1,685.1	1,728.0	1,813.2	1,817.4	1,753.7	1,709.7	1,672.0
1977	1,711.0	1,637.0	1,632.1	1,637.7	1,645.0	1,656.3	1,717.3	1,746.9	1,826.6	1,839.7	1,764.8	1,725.4	1,699.3
1978	1,734.1	1,665.0	1,654.5	1,668.2	1,663.7	1,680.0	1,722.3	1,749.1	1,823.3	1,829.0	1,773.5	1,748.4	1,723.9
1979	1,732.5	1,685.2	1,686.2	1,676.2	1,667.1	1,681.4	1,730.9	1,754.4	1,834.7	1,841.6	1,790.2	1,745.7	1,716.6
1980	1,708.0	1,671.6	1,657.4	1,665.2	1,638.0	1,652.6	1,692.5	1,728.3	1,824.7	1,819.6	1,780.7	1,713.0	1,681.6
1981	1,671.1	1,637.9	1,631.0	1,623.4	1,619.1	1,634.4	1,668.6	1,699.6	1,756.0	1,750.7	1,712.9	1,675.8	1,643.0
1982	1,635.9	1,594.3	1,595.3	1,588.3	1,568.0	1,583.1	1,619.2	1,665.1	1,720.7	1,732.1	1,691.7	1,644.8	1,606.5
1983	1,622.0	1,586.3	1,555.3	1,552.3	1,556.9	1,575.6	1,618.2	1,658.0	1,712.4	1,723.7	1,679.7	1,648.9	1,616.3
1984		1,586.4	1,578.5	1,575.7	1,563.8	1,598.1	1,637.6	1,686.1					

WOMEN EMPLOYEES—IN THOUSANDS

1909		389.0			372.6			437.4			479.0		
1955		403.5			387.5			446.2			494.4		
1956		394.9			381.6			442.4			500.1		
1957		404.9			388.9			448.1			491.7		
1958		397.6			384.3			426.8			473.5		
1959		388.4			388.3			438.8			485.5		
1960		388.8			388.9			434.0			503.2		
1961		387.6			395.2			431.2			472.2		
1962		388.5			376.4			422.2			468.2		
1963	436.2	384.0	382.2	381.2	391.5	395.5	417.3	431.5	502.9	505.9	470.1	438.0	413.0
1964	426.8	388.8	385.8	383.7	385.7	396.2	412.8	431.8	486.9	506.3	489.9	439.8	413.4
1965	423.1	387.7	384.7	387.3	390.5	390.4	411.0	420.9	463.9	495.2	472.7	441.7	410.9
1966	419.9	392.1	375.5	376.8	391.8	390.3	412.0	420.1	479.2	486.3	467.6	430.1	408.6
1967	421.2	384.8	379.1	382.9	387.3	388.9	408.2	421.3	465.4	487.8	478.2	436.1	412.2
1968	421.3	387.2	381.1	386.5	387.2	392.4	405.5	422.0	466.4	488.5	478.0	440.4	418.7
1969	423.5	389.2	383.1	383.5	379.3	387.3	404.1	427.2	478.1	480.4	473.8	458.2	425.9
1970	443.2	403.3	401.9	404.0	404.8	404.1	426.0	444.2	500.0	500.7	490.7	473.9	449.3
1971	451.3	422.3	414.5	419.0	417.3	422.5	440.8	453.9	487.1	519.6	500.2	469.7	448.2
1972	452.9	417.8	410.1	416.4	419.3	422.7	443.7	452.7	513.5	520.7	500.2	467.3	450.4
1973	462.4	422.7	421.8	424.6	426.6	432.4	450.9	463.4	527.0	532.8	501.6	483.8	460.9
1974	464.0	436.3	436.5	438.0	431.1	433.8	456.0	463.6	522.6	522.1	495.7	477.8	455.0
1975	460.7	427.0	424.5	426.8	423.5	428.6	447.6	464.0	525.4	533.7	491.3	478.9	456.5
1976	464.7	436.0	426.7	433.8	429.8	436.2	463.2	472.1	521.9	527.9	498.7	478.1	452.7
1977	463.4	428.8	429.6	429.6	431.1	430.3	447.6	463.5	513.1	524.2	507.1	487.0	468.8

See footnotes at end of tables.

SIC 20—FOOD AND KINDRED PRODUCTS (Con.)

WOMEN EMPLOYEES—IN THOUSANDS

Year	Ann. Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1974	464.5	442.6	436.6	445.1	434.2	440.2	449.0	461.5	518.5	531.5	499.7	470.2	464.5
1975	448.1	409.5	404.6	409.2	409.6	417.2	434.5	453.0	511.6	522.2	494.3	468.9	445.0
1976	466.0	429.2	428.1	431.3	431.6	441.0	458.8	480.2	528.7	536.4	499.2	473.9	453.5
1977	478.5	435.6	437.4	446.3	449.2	450.3	472.6	488.1	533.9	548.2	511.0	493.3	476.6
1978	485.6	458.7	456.8	464.8	461.4	463.7	487.5	504.4	546.6	558.9	529.0	515.6	500.1
1979	511.1	481.7	472.7	480.7	475.5	483.8	506.8	518.1	565.3	572.0	547.8	523.4	505.8
1980	508.5	484.2	480.0	481.0	473.8	479.2	493.7	512.1	570.2	572.7	540.2	516.1	498.8
1981	501.3	473.2	473.3	473.4	473.1	478.7	489.6	510.1	548.1	550.7	531.1	512.5	494.0
1982	495.7	468.6	468.5	470.4	468.3	470.1	488.6	507.8	547.4	549.1	531.7	507.9	486.0
1983	490.4	469.3	465.5	464.3	467.9	475.7	494.5	513.5	545.2	549.7	527.3	513.0	494.3
1984		478.4	476.3	472.7	475.6	482.1	497.0	527.0					

PRODUCTION WORKERS—IN THOUSANDS

1929	835												
1930	811												
1931	718												
1932	666												
1933	754												
1934	895												
1935	902												
1936	949												
1937	1,005												
1938	906												
1939	909	886	875	885	904	930	978	1,043	1,142	1,177	1,075	1,005	963
1940	1,003	915	900	900	918	933	995	1,043	1,126	1,150	1,101	1,030	1,010
1941	1,111	951	934	951	984	1,019	1,085	1,174	1,208	1,331	1,252	1,203	1,161
1942	1,260	1,125	1,115	1,106	1,129	1,151	1,202	1,319	1,405	1,516	1,388	1,338	1,319
1943	1,347	1,267	1,245	1,230	1,230	1,256	1,316	1,399	1,495	1,504	1,435	1,400	1,385
1944	1,387	1,334	1,322	1,311	1,316	1,327	1,386	1,454	1,488	1,495	1,443	1,407	1,382
1945	1,380	1,348	1,334	1,321	1,323	1,322	1,351	1,413	1,422	1,498	1,432	1,386	1,364
1946	1,415	1,370	1,364	1,360	1,359	1,351	1,386	1,462	1,542	1,536	1,422	1,443	1,409
1947	1,386	1,313	1,288	1,264	1,273	1,288	1,337	1,458	1,504	1,537	1,467	1,429	1,367
1948	1,373	1,300	1,279	1,266	1,277	1,221	1,368	1,473	1,521	1,646	1,485	1,393	1,333
1949	1,341	1,252	1,224	1,224	1,234	1,283	1,328	1,402	1,541	1,531	1,451	1,350	1,295
1950	1,331	1,229	1,206	1,210	1,210	1,248	1,304	1,402	1,514	1,537	1,435	1,399	1,313
1951	1,338.4	1,267.9	1,247.5	1,244.2	1,239.7	1,256.8	1,318.8	1,401.4	1,480.5	1,525.0	1,442.7	1,337.3	1,290.1
1952	1,330.9	1,229.2	1,221.2	1,217.0	1,227.2	1,244.9	1,318.9	1,407.7	1,484.3	1,533.8	1,448.2	1,352.4	1,294.1
1953	1,329.7	1,240.7	1,227.9	1,217.6	1,223.2	1,251.4	1,302.2	1,403.8	1,499.4	1,536.3	1,438.5	1,349.2	1,278.6
1954	1,296.6	1,215.1	1,198.7	1,190.8	1,204.5	1,229.7	1,281.6	1,353.9	1,444.0	1,477.5	1,386.2	1,310.4	1,256.8
1955	1,291.7	1,197.5	1,174.0	1,181.5	1,203.2	1,229.7	1,286.3	1,351.1	1,448.9	1,444.5	1,399.9	1,328.7	1,264.5
1956	1,302.1	1,204.1	1,192.7	1,202.1	1,208.2	1,236.3	1,291.9	1,341.7	1,455.8	1,493.3	1,412.2	1,321.7	1,266.9
1957	1,263.2	1,198.7	1,173.1	1,176.6	1,178.7	1,198.2	1,252.9	1,321.6	1,402.0	1,427.4	1,343.1	1,264.9	1,222.4
1958	1,222.0	1,162.7	1,137.5	1,123.0	1,130.7	1,157.6	1,221.7	1,264.8	1,357.4	1,387.2	1,308.6	1,241.1	1,190.7
1959	1,222.1	1,147.2	1,134.7	1,132.0	1,147.9	1,163.5	1,224.4	1,261.2	1,373.1	1,368.3	1,288.7	1,235.2	1,188.4
1960	1,211.8	1,146.4	1,125.8	1,119.8	1,144.3	1,153.8	1,203.6	1,253.9	1,331.6	1,380.8	1,308.6	1,223.8	1,170.7
1961	1,191.1	1,124.4	1,103.5	1,108.8	1,116.5	1,124.9	1,184.0	1,225.7	1,313.9	1,329.8	1,282.5	1,219.0	1,159.9
1962	1,178.4	1,108.2	1,087.3	1,085.7	1,110.6	1,120.1	1,174.1	1,221.7	1,301.9	1,326.6	1,265.3	1,180.9	1,158.7
1963	1,167.1	1,102.8	1,081.8	1,088.8	1,088.7	1,104.8	1,152.1	1,198.1	1,286.9	1,306.5	1,265.5	1,184.0	1,142.7
1964	1,157.3	1,095.1	1,078.0	1,072.2	1,081.3	1,096.0	1,138.1	1,184.5	1,275.0	1,288.4	1,241.7	1,188.8	1,147.7
1965	1,159.1	1,099.4	1,075.6	1,077.1	1,088.8	1,090.5	1,137.2	1,188.6	1,271.7	1,281.6	1,249.8	1,212.7	1,159.7
1966	1,180.0	1,108.8	1,095.6	1,099.7	1,101.3	1,107.5	1,166.1	1,215.6	1,310.5	1,301.7	1,258.3	1,218.9	1,175.5
1967	1,187.3	1,128.9	1,110.1	1,113.0	1,112.1	1,129.9	1,183.2	1,217.2	1,288.8	1,316.2	1,273.5	1,216.5	1,178.5
1968	1,191.6	1,119.3	1,097.2	1,103.4	1,112.9	1,125.0	1,182.5	1,220.0	1,319.5	1,321.4	1,279.7	1,219.1	1,189.4

BEST AVAILABLE COPY

Producer Price Data

WPIPLUSU2 Farm products, processed foods and feeds — BASE 1967 = 100

YR	ANN AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1947	94.3	86.9	90.5	94.9	92.2	90.7	90.9	92.1	93.3	97.1	98.4	99.4	102.7
1948	101.5	105.1	99.6	99.5	101.1	102.9	104.3	104.8	104.3	103.1	99.4	97.7	95.7
1949	89.6	93.3	89.9	90.8	90.3	90.2	89.4	89.1	89.5	89.8	88.4	88.1	87.2
1950	93.9	86.9	88.3	88.9	88.6	90.6	91.1	96.2	98.3	99.6	97.3	98.9	102.0
1951	106.9	105.8	109.4	109.1	109.0	108.4	107.1	105.5	105.4	105.0	106.2	106.1	105.6
1952	102.7	104.7	103.4	103.4	103.0	103.0	102.7	104.8	104.8	103.2	101.5	100.6	96.9
1953	96.0	97.6	96.7	97.1	95.4	96.3	94.6	96.9	95.8	97.5	95.2	94.1	94.7
1954	95.7	97.1	96.5	97.0	97.7	97.5	95.2	96.6	96.4	94.9	93.7	93.8	92.2
1955	91.2	93.5	93.4	92.3	93.6	92.1	93.3	91.8	90.6	91.0	89.1	87.2	86.3
1956	90.6	86.9	88.1	88.5	89.7	92.1	92.2	91.5	92.1	91.8	91.5	91.3	91.5
1957	93.7	92.3	91.9	91.8	92.9	92.7	93.9	95.3	95.2	94.2	93.9	94.6	95.3
1958	98.1	96.9	98.2	100.7	99.7	100.8	99.7	99.0	97.5	97.4	96.5	96.1	95.1
1959	93.5	95.5	94.8	94.5	95.2	94.7	94.4	93.4	92.0	93.8	92.0	90.8	90.9
1960	93.7	91.6	91.9	94.3	94.4	94.3	93.8	94.3	92.7	93.3	94.7	94.9	94.4
1961	93.7	95.2	95.6	95.2	94.0	92.7	91.5	92.8	93.P	93.2	93.3	93.3	93.8
1962	94.7	95.2	95.2	95.2	93.8	93.2	92.9	94.0	94.9	97.1	95.3	95.4	94.4
1963	93.8	94.9	93.8	92.6	92.8	93.5	94.2	94.9	94.0	93.6	94.2	94.8	92.4
1964	93.2	94.8	93.3	93.3	93.0	92.0	92.3	93.3	92.9	94.4	93.3	93.0	92.4
1965	97.1	93.3	93.8	94.1	95.2	96.1	98.4	98.6	98.2	98.4	98.5	99.1	101.2
1966	103.5	102.4	104.4	104.0	103.3	102.6	102.4	104.5	105.8	106.0	103.4	101.8	101.4
1967	100.0	101.7	100.4	99.3	98.3	99.9	101.5	101.9	100.0	100.1	99.0	98.3	99.6
1968	102.4	100.1	101.5	101.6	101.5	102.7	102.8	104.0	102 5	103.1	102.1	103.0	103.1
1969	108.0	104.5	104.7	105.3	105.5	108.7	110.1	110.3	108.9	108.7	108.7	110.0	110.8
1970	111.7	112.5	112.9	112.9	111.8	111.2	111.8	113.4	111.1	112.7	110.4	110.0	109.3
1971	113.9	110.7	113.7	113.5	113.3	114.3	115.5	115.0	114.7	113.2	113.0	113.6	115.9
1972	122.4	117.4	119.6	119.1	118.3	120.0	121.3	124.0	123.8	124.5	123.3	125.3	132.6
1973	159.1	137.0	142.4	149.0	147.9	154.9	163.6	156.9	184.5	173.5	166.8	164.4	168.0
1974	177.4	177.8	180.6	176.2	169.6	167.4	161.7	172.7	183.4	179.1	185.1	189.0	186.5
1975	184.2	183.8	179.5	174.9	178.8	181.2	182.3	188.2	189.0	190.4	190.5	186.1	186.0
1976	183.1	184.6	181.9	180.0	183.7	184.8	187.4	188.1	181.7	182.9	179.5	178.3	183.9
1977	188.8	184.8	188.4	190.9	195.9	196.8	191.5	188.7	184.3	184.0	184.0	187.0	189.4
1978	206.6	192.2	196.8	200.0	205.5	207.6	210.4	210.3	205.3	209.4	213.2	212.3	216.2
1979	229.8	221.1	227.2	229.0	231.2	230.8	229.0	232.2	227.5	231.8	230.6	232.3	234.6
1980	244.7	231.9	237.0	234.9	229.1	233.8	234.3	244.6	255.1	256.5	259.4	260.5	257.0
1981	251.5	257.9	255.1	253.5	253.6	252.2	254.3	256.8	254.2	250.3	246.0	242.5	241.0
1982	248.9	246.0	248.4	247.5	251.6	255.8	255.3	252.4	249.6	247.4	245.8	243.9	244.8
1983	253.9	245.8	250.4	250.6	254.7	254.7	252.5	251.5	255.5	259.1	257.5	256.0	257.9
1984	262.4	264.4	263.4	267.9	267.3	265.8	262.8	264.9	261.4	259.4	255.3	258.1	258.6
1985	250.5	257.6	258.0	254.6	253.1	250.2	249.1	249.6	244.0	240.9	245.1	251.0	252.6
1986	251.9	251.5	248.3	247.3	246.2	250.8	249.8	254.2	255.5	254.0	254.8	255.5	254.7
1987	NA	251.6	252.8	252.0	257.1	263.7	262.6	261.8	258.6	260.0	258.7	NA	NA

NA NOT AVAILABLE

Source: Bureau of Labor Statistics

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Senator SARBANES. Commissioner, thank you very much, and your associates. We are pleased to have had you back before the committee.

The committee stands adjourned.

[Whereupon, at 10:30 a.m., the committee adjourned, subject to the call of the Chair.]

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, DECEMBER 4, 1987

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, DC.

The committee met, pursuant to notice, at 9:40 a.m., in room SD-628, Dirksen Senate Office Building, Hon. Paul S. Sarbanes (chairman of the committee) presiding.

Present: Senators Sarbanes and Melcher; and Representative Solarz.

Also present: Judith Davison, executive director; and William Buechner, Jim Klumpner, Chris Frenze, and Joe Cobb, professional staff members.

OPENING STATEMENT OF SENATOR SARBANES, CHAIRMAN

Senator SARBANES. The committee will come to order.

I am very pleased once again to welcome Janet Norwood, Commissioner of Labor Statistics before the Joint Economic Committee to discuss the employment and unemployment situation for November.

Obviously, there is a great deal of uncertainty nowadays about the direction of the economy. Not only the drop in the market on October 19 but the continuing volatility in the market since then have reinforced concerns about the underlying strength of the economy and the prospects of a recession.

In this context, obviously, we need to look at the monthly unemployment figures with some care although, as we have been constantly admonished by the Commissioner herself, you can't discern a trend in the figures of a month or two, and sometimes the impact of events takes time to be reflected.

Commissioner, we are very pleased to have you and your associates back with us this morning, and we are prepared to hear your statement.

Before you begin, Mrs. Norwood, Senator Roth has requested that his written opening statement be placed in the hearing record. Without objection, so ordered.

[The written opening statement follows:]

WRITTEN OPENING

STATEMENT OF SENATOR ROTH

NOVEMBER EMPLOYMENT SITUATION

DECEMBER 4, 1987

IT GIVES ME GREAT PLEASURE TO WELCOME COMMISSIONER NORWOOD HERE THIS MORNING.

ONCE AGAIN COMMISSIONER NORWOOD BRINGS VERY GOOD NEWS. THE CIVILIAN UNEMPLOYMENT RATE DECLINED ONE TENTH OF A POINT IN NOVEMBER TO A LEVEL OF 5.9 PERCENT. THIS IS THE LOWEST UNEMPLOYMENT RATE SINCE THE END OF 1979.

CIVILIAN EMPLOYMENT, AS MEASURED BY THE HOUSEHOLD SURVEY, POSTED A GAIN OF 315,000. THE NOVEMBER JOB GAIN PUSHES THE LEVEL OF TOTAL EMPLOYMENT TO 113.5 MILLION, A NEW RECORD. MORE AMERICANS ARE WORKING TODAY THAN EVER BEFORE.

THE EMPLOYMENT-POPULATION RATIO, AN IMPORTANT MEASURE OF OUR ECONOMY'S ABILITY TO CREATE ENOUGH JOBS, ALSO SIGNALS ECONOMIC STRENGTH. THE 61.9 PERCENT NOVEMBER E-P RATIO IS EXTREMELY HIGH BY HISTORICAL STANDARDS.

DURING THIS EXPANSION THE ECONOMIC PROGRESS HAS BEEN IMPRESSIVE. OVER 14 MILLION JOBS HAVE BEEN CREATED, WITHOUT THE HIGH INFLATION THAT UNDERMINED PREVIOUS RECOVERIES. THOUGH

PROBLEMS REMAIN, THE EVIDENCE CERTAINLY DOES NOT SUPPORT THOSE WHO CONSTANTLY VOICE PESSIMISM ABOUT THE DIRECTION OF THE ECONOMY. THIS UPSWING IS NOW THE LONGEST PEACETIME EXPANSION IN U.S. HISTORY. WHILE THE PESSIMISTS HAVE BEEN GLOOMING AND DOOMING, EMPLOYMENT HAS BEEN BOOMING.

OUR TASK AS ECONOMIC POLICY MAKERS IS TO AVOID ACTIONS WHICH MIGHT JEOPARDIZE THE RECORD BREAKING EXPANSION. CONTINUED ECONOMIC GROWTH WILL FURTHER IMPROVE THE STANDARD OF LIVING, WHILE EXTENDING OPPORTUNITY TO THE LEAST FORTUNATE OF OUR CITIZENS.

THANK YOU, MR. CHAIRMAN.

Senator SARBANES. Please proceed, Mrs. Norwood.

STATEMENT OF HON. JANET L. NORWOOD, COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY KENNETH V. DALTON, ASSOCIATE COMMISSIONER, OFFICE OF PRICES AND LIVING CONDITIONS; AND THOMAS J. PLEWES, ASSOCIATE COMMISSIONER, OFFICE OF EMPLOYMENT AND UNEMPLOYMENT STATISTICS

Mrs. NORWOOD. Thank you very much, Mr. Chairman and Senator Melcher. We are pleased to be here.

Labor market developments continued positive in November as the economy completed a fifth year of expansion. Employment rose markedly by about 300,000 in both surveys.

The overall unemployment rate, at 5.8 percent, and the civilian rate, at 5.9 percent, have changed very little in the last few months, but both rates are a full percentage point below the level of last year.

Manufacturing showed continued job strength, with about 70,000 workers added to factory payrolls in November. Since last June, factory jobs have risen by 300,000. The November increases in manufacturing were fairly widespread.

The BLS diffusion index showed that nearly 7 out of 10 industries added workers. In fact, over-the-month job gains occurred in nearly all of the 20 individual manufacturing industries for which we publish employment estimates in our monthly news release.

Factory hours also continued to be very high. At 41.2 hours in November, the factory workweek was just a tenth of an hour below the October level, and factory hours in both of those months represent the longest workweeks in 21 years. Factory overtime hours, although down slightly from October, were also extremely high by historical standards.

Construction employment, which usually contracts in the fall as colder weather limits outdoor work activity, fell less than usual this November. As a result, employment in this industry rose by 35,000 after seasonal adjustment. Over the past year, job gains in construction have been relatively small.

Services employment continued to expand, adding about 90,000 jobs from October to November. Over half of that increase was in health services. Elsewhere in the service-producing sector, employment rose by about 25,000 in both transportation and public utilities and in wholesale trade. In addition, 15,000 jobs were added in finance, insurance and real estate. These figures suggest that the difficulties faced by the financial securities industry have not yet affected our employment measure.

After growing by 140,000 in September and October, employment in retail trade changed little in November after seasonal adjustment. The November weakness resulted from smaller-than-usual job increases in department stores. Over the past year, employment in retail trade has increased by 380,000.

Overall, employment has risen by about 3 million over the past year. More than a third of this total occurred in the services industry alone, which added just over 1 million jobs. About 700,000 of

that increase was in the two fastest growing of the services industries—business and health services.

Adult women accounted for a little more than half of the 3 million increase and adult men had 1.3 million of the job gain. The employment-population ratio rose a full percentage point over the year to a new high of 61.9 percent.

As I indicated earlier in my statement, the Nation's jobless rate has declined by a full percentage point since November a year ago. Nearly all of that improvement occurred from late 1986 through the early summer of this year. Since June, the continued growth in employment, although fairly large, has been just about enough to absorb growth in the labor force.

In summary, labor market growth continues to be strong. Employment gains in November were large and widespread. Factory jobs rose again, and factory hours were very high. The labor force continued to grow. The number of unemployed, at 7.1 million in November, was more than a million below the level of a year ago.

Mr. Chairman, we would be glad to try to answer any questions you may have.

[The table attached to Mrs. Norwood's statement, together with the Employment Situation press release, follows:]

Unemployment rates of all civilian workers by alternative seasonal adjustment methods

Month and year	Unadjusted rate	X-11 ARIMA method							X-11 method (official method before 1980)	Range (cols. 2-9)
		Official procedure	Concurrent (as first computed)	Concurrent (revised)	Stable	Total	Residual	12-month extrapolation		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1986										
November....	6.6	6.9	6.9	6.9	6.9	6.9	7.0	6.9	7.0	.1
December....	6.3	6.7	6.7	6.7	6.6	6.7	6.7	6.7	6.7	.1
1987										
January.....	7.3	6.7	6.7	6.7	6.7	6.8	6.6	6.7	6.7	.2
February....	7.2	6.7	6.7	6.6	6.6	6.7	6.5	6.7	6.7	.2
March.....	6.9	6.6	6.6	6.5	6.6	6.6	6.5	6.6	6.6	.1
April.....	6.2	6.3	6.3	6.3	6.4	6.3	6.3	6.3	6.3	.1
May.....	6.1	6.3	6.3	6.3	6.4	6.3	6.4	6.3	6.3	.1
June.....	6.3	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	-
July.....	6.1	6.0	6.1	6.1	6.0	6.0	6.0	6.0	6.0	.1
August.....	5.8	6.0	6.0	6.0	5.9	6.1	6.2	6.0	6.0	.3
September...	5.7	5.9	5.9	5.9	5.9	5.9	6.0	5.9	5.9	.1
October.....	5.7	6.0	6.0	6.0	6.0	5.9	6.0	6.0	6.0	.1
November....	5.6	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	-

SOURCE: U.S. DEPARTMENT OF LABOR
Bureau of Labor Statistics
December 1987

(1) Unadjusted rate. Unemployment rate for all civilian workers, not seasonally adjusted.

(2) Official procedure (X-11 ARIMA method). The published seasonally adjusted rate for all civilian workers. Each of the 3 major civilian labor force components—agricultural employment, nonagricultural employment and unemployment—for 4 age-sex groups—males and females, ages 16-19 and 20 years and over—are seasonally adjusted independently using data from January 1974 forward. The data series for each of these 12 components are extended by a year at each end of the original series using ARIMA (Auto-Regressive, Integrated, Moving Average) models chosen specifically for each series. Each extended series is then seasonally adjusted with the X-11 portion of the X-11 ARIMA program. The 4 teenage unemployment and nonagricultural employment components are adjusted with the additive adjustment model, while the other components are adjusted with the multiplicative model. The unemployment rate is computed by summing the 4 seasonally adjusted unemployment components and calculating that total as a percent of the civilian labor force total derived by summing all 12 seasonally adjusted components. All the seasonally adjusted series are revised at the end of each year. Extrapolated factors for January-June are computed at the beginning of each year; extrapolated factors for July-December are computed in the middle of the year after the June data become available. Each set of 6-month factors are published in advance, in the January and July issues, respectively, of Employment and Earnings.

(3) Concurrent (as first computed, X-11 ARIMA method). The official procedure for computation of the rate for all civilian workers using the 12 components is followed except that extrapolated factors are not used at all. Each component is seasonally adjusted with the X-11 ARIMA program each month as the most recent data become available. Rates for each month of the current year are shown as first computed; they are revised only once each year, at the end of the year when data for the full year become available. For example, the rate for January 1984 would be based, during 1984, on the adjustment of data from the period January 1974 through January 1984.

(4) Concurrent (revised, X-11 ARIMA method). The procedure used is identical to (3) above, and the rate for the current month (the last month displayed) will always be the same in the two columns. However, all previous months are subject to revision each month based on the seasonal adjustment of all the components with data through the current month.

(5) Stable (X-11 ARIMA method). Each of the 12 civilian labor force components is extended using ARIMA models as in the official procedure and then run through the X-11 part of the program using the stable option. This option assumes that seasonal patterns are basically constant from year-to-year and computes final seasonal factors as unweighted averages of all the seasonal-irregular components for each month across the entire span of the period adjusted. As in the official procedure, factors are extrapolated in 6-month intervals and the series are revised at the end of each year. The procedure for computation of the rate from the seasonally adjusted components is also identical to the official procedure.

(6) Total (X-11 ARIMA method). This is one alternative aggregation procedure, in which total unemployment and civilian labor force levels are extended with ARIMA models and directly adjusted with multiplicative adjustment models in the X-11 part of the program. The rate is computed by taking seasonally adjusted total unemployment as a percent of seasonally adjusted total civilian labor force. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(7) Residual (X-11 ARIMA method). This is another alternative aggregation method, in which total civilian employment and civilian labor force levels are extended using ARIMA models and then directly adjusted with multiplicative adjustment models. The seasonally adjusted unemployment level is derived by subtracting seasonally adjusted employment from seasonally adjusted labor force. The rate is then computed by taking the derived unemployment level as a percent of the labor force level. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(8) 12-month extrapolation (X-11 ARIMA method). This approach is the same as the official procedure except that the factors are extrapolated in 12-month intervals. The factors for January-December of the current year are computed at the beginning of the year based on data through the preceding year. The values for January through June of the current year are the same as the official values since they reflect the same factors.

(9) X-11 method (official method before 1980). The method for computation of the official procedure is used except that the series are not extended with ARIMA models and the factors are projected in 12-month intervals. The standard X-11 program is used to perform the seasonal adjustment.

Methods of Adjustment: The X-11 ARIMA method was developed at Statistics Canada by the Seasonal Adjustment and Times Series Staff under the direction of Estela Bee Dagum. The method is described in The X-11 ARIMA Seasonal Adjustment Method, by Estela Bee Dagum, Statistics Canada Catalogue No. 12-564E, February 1980.

The standard X-11 method is described in X-11 Variant of the Census Method II Seasonal Adjustment Program, by Julius Shiskin, Allan Young and John Musgrave (Technical Paper No. 15, Bureau of the Census, 1967).

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523-1959
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USDL 87-536

TRANSMISSION OF MATERIAL IN THIS RELEASE IS EMBARGOED UNTIL 8:30 A.M. (EST), FRIDAY, DECEMBER 4, 1987

THE EMPLOYMENT SITUATION: NOVEMBER 1987

Employment continued to rise in November, while unemployment remained at about the same level that has prevailed since early summer, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. The overall jobless rate was 5.8 percent, and the civilian worker rate was 5.9 percent.

Nonagricultural payroll employment, as measured by the monthly survey of business establishments, rose by 275,000, and civilian employment, as measured by the household survey, rose by 315,000. Both surveys showed increases of roughly 3 million from a year earlier.

Unemployment (Household Survey Data)

The number of unemployed persons, at 7.1 million in November, and the civilian unemployment rate, at 5.9 percent, were little changed from October, after seasonal adjustment. These measures have shown little or no movement since June. However, the November unemployment level was 1.1 million lower than a year earlier, and the jobless rate was down a full percentage point over this period. (See table A-2.)

Unemployment rates for virtually all major labor force groups were about unchanged from October to November, but, as with the overall rate, there has been considerable improvement for most groups over the past year. For example, jobless rates for adult men (5.0 percent), adult women (5.2 percent), whites (5.1 percent), and blacks (12.1 percent) all were down substantially from November 1986. The teenage rate (16.8 percent) has edged down only slightly. The jobless rate for manufacturing workers, at 5.3 percent, was down nearly 2 percentage points from a year earlier. (See tables A-2, A-3, and A-6.)

Both the mean and median duration of unemployment, at 13.8 and 6.1 weeks, respectively, were about unchanged from October. (See table A-7.)

Civilian Employment and the Labor Force (Household Survey Data)

Civilian employment. rose by 315,000 in November, after seasonal adjustment, following a substantial increase in the prior month. All of the employment growth occurred among adults. The proportion of the population that is employed increased by two-tenths of a percentage point, reaching a new high of 61.9 percent. (See table A-2.)

The civilian labor force continued to expand, rising by 255,000 in November to a seasonally adjusted level of 120.6 million. The labor force participation rate remained at a high of 65.7 percent. Over the year, the labor force has grown by 2.0 million, with adult women accounting for about three-fifths of the increase. Hispanics comprised about a quarter of the over-the-year gain.

Table A. Major indicators of labor market activity, seasonally adjusted

Category	Quarterly averages		Monthly data			Oct.-Nov. change
	1987		1987			
	II	III	Sept.	Oct.	Nov.	
HOUSEHOLD DATA						
	Thousands of persons					
Labor force 1/.....	121,341	121,771	121,604	122,102	122,371	269
Total employment 1/..	113,906	114,593	114,515	114,928	115,255	327
Civilian labor force...	119,615	120,038	119,861	120,361	120,616	255
Civilian employment..	112,180	112,860	112,772	113,187	113,500	313
Unemployment.....	7,435	7,178	7,089	7,174	7,116	-58
Not in labor force.....	62,912	62,978	63,300	62,950	62,854	-96
Discouraged workers..	1,037	1,011	N.A.	N.A.	N.A.	N.A.
	Percent of labor force					
Unemployment rates:						
All workers 1/.....	6.1	5.9	5.8	5.9	5.8	-0.1
All civilian workers.	6.2	6.0	5.9	6.0	5.9	-.1
Adult men.....	5.5	5.2	5.0	5.1	5.0	-.1
Adult women.....	5.4	5.4	5.4	5.2	5.2	0
Teenagers.....	17.0	15.9	16.3	17.4	16.8	-.6
White.....	5.3	5.1	5.1	5.2	5.1	-.1
Black.....	13.2	12.4	12.3	12.0	12.1	.1
Hispanic origin....	8.8	8.0	8.2	8.3	9.1	.8
ESTABLISHMENT DATA						
	Thousands of jobs					
Nonfarm employment.....	101,708	102,278	102,434	p102,970	p103,244	p274
Goods-producing.....	24,757	24,884	24,917	p25,053	p25,152	p99
Service-producing....	76,951	77,394	77,517	p77,917	p78,092	p175
	Hours of work					
Average weekly hours:						
Total private.....	34.8	34.8	34.6	p34.9	p34.9	p0
Manufacturing.....	40.9	40.9	40.6	p41.3	p41.2	p-0.1
Overtime.....	3.7	3.7	3.6	p4.0	p3.9	p-.1

1/ Includes the resident Armed Forces. N.A.=not available.
p=preliminary.

Industry Payroll Employment (Establishment Survey Data)

Total nonagricultural employment, at 103.2 million, rose by 275,000 in November, seasonally adjusted. The goods-producing sector was unusually strong, accounting for more than a third of the job gain. (See table B-1.)

Factory employment rose by 70,000 in November, following a similar advance in October. Job growth was widespread in both the durable and nondurable goods components, as nearly all of the 20 individual industries showed gains. Since June, the number of factory jobs has increased by 300,000. Elsewhere in the goods sector, construction employment increased by 35,000 after seasonal adjustment, as seasonal layoffs were fewer than usual (following weak summer hiring).

Employment in the service-producing sector rose by 175,000 in November. There was a 90,000 increase in the services industry, paced by gains in health services; transportation and public utilities and wholesale trade each added 25,000 jobs; and the finance, insurance, and real estate industry posted a 15,000 gain. However, retail trade employment was about unchanged after seasonal adjustment, primarily because holiday-related hiring in one of its major components--general merchandise stores--was less than seasonally expected.

Weekly Hours (Establishment Survey Data)

The average workweek of production or nonsupervisory workers on private nonagricultural payrolls was unchanged at 34.9 hours in November, seasonally adjusted. In manufacturing, both the workweek (41.2 hours) and overtime (3.9 hours), while down fractionally over the month, were at historically high levels. (See table B-2.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls rose 0.2 percent to 122.2 (1977=100) seasonally adjusted, as a result of the employment gains. The manufacturing index rose 0.3 percent to 95.3. (See table B-5.)

Hourly and Weekly Earnings (Establishment Survey Data)

Both average hourly earnings and average weekly earnings rose by 0.6 percent in November, seasonally adjusted. Before seasonal adjustment, average hourly earnings rose by 5 cents to $9.14, and average weekly earnings were up 83 cents to $318.07. Over the past 12 months, hourly earnings have risen 26 cents and weekly earnings have increased by $9.93. (See table B-3.)

The Hourly Earnings Index (Establishment Survey Data)

The Hourly Earnings Index (HEI) was 175.7 (1977=100) in November, seasonally adjusted, an increase of 0.5 percent from October. For the 12 months ended in November, the increase was 2.6 percent. The HEI excludes

the effects of two types of changes unrelated to underlying wage rate movements--fluctuations in manufacturing overtime and interindustry employment shifts. In dollars of constant purchasing power, the HEI decreased 1.8 percent during the 12-month period ended in October. (See table B-4.)

Revisions in Household Survey Data

In accordance with usual practice, the Employment Situation release of December data will incorporate annual revisions in seasonally adjusted unemployment and other labor force series. Seasonally adjusted data for the most recent 5 years are subject to revision.

The Employment Situation for December 1987 will be released on Friday, January 8, 1988, at 8:30 A.M. (EST). Release dates for the balance of 1988 are as follows:

Feb. 5	May 6	Aug. 5	Nov. 4
March 4	June 3	Sept. 2	Dec. 2
April 1	July 8	Oct. 7	

Explanatory Note

This news release presents statistics from two major surveys, the Current Population Survey (household survey) and the Current Employment Statistics Survey (establishment survey). The household survey provides the information on the labor force, total employment, and unemployment that appears in the A tables, marked HOUSEHOLD DATA. It is a sample survey of about 59,500 households that is conducted by the Bureau of the Census with most of the findings analyzed and published by the Bureau of Labor Statistics (BLS).

The establishment survey provides the information on the employment, hours, and earnings of workers on nonagricultural payrolls that appears in the B tables, marked ESTABLISHMENT DATA. This information is collected from payroll records by BLS in cooperation with State agencies. The sample includes over 290,000 establishments employing over 38 million people.

For both surveys, the data for a given month are actually collected for and relate to a particular week. In the household survey, unless otherwise indicated, it is the calendar week that contains the 12th day of the month, which is called the survey week. In the establishment survey, the reference week is the pay period including the 12th, which may or may not correspond directly to the calendar week.

The data in this release are affected by a number of technical factors, including definitions, survey differences, seasonal adjustments, and the inevitable variance in results between a survey of a sample and a census of the entire population. Each of these factors is explained below.

Coverage, definitions, and differences between surveys

The sample households in the household survey are selected so as to reflect the entire civilian noninstitutional population 16 years of age and older. Each person in a household is classified as employed, unemployed, or not in the labor force. Those who hold more than one job are classified according to the job at which they worked the most hours.

People are classified as *employed* if they did any work at all as paid civilians; worked in their own business or profession or on their own farm; or worked 15 hours or more in an enterprise operated by a member of their family, whether they were paid or not. People are also counted as employed if they were on unpaid leave because of illness, bad weather, disputes between labor and management, or personal reasons. Members of the Armed Forces stationed in the United States are also included in the employed total.

People are classified as *unemployed*, regardless of their eligibility for unemployment benefits or public assistance, if they meet all of the following criteria: They had no employment during the survey week; they were available for work at that time; and they made specific efforts to find employment sometime during the prior 4 weeks. Persons laid off from their former jobs and awaiting recall and those expecting to report to a job within 30 days need not be looking for work to be counted as unemployed.

The *labor force* equals the sum of the number employed and the number unemployed. The *unemployment rate* is the percentage of unemployed people in the labor force (civilian plus the resident Armed Forces). Table A-5 presents a special grouping of seven measures of unemployment based on varying definitions of unemployment and the labor force. The definitions are provided in the table. The most restrictive definition yields U-1 and the most comprehensive yields U-7. The overall unemployment rate is U-3a, while U-5b represents the same measure with a civilian labor force base.

Unlike the household survey, the establishment survey only counts wage and salary employees whose names appear on the payroll records of nonagricultural firms. As a result, there are many differences between the two surveys, among which are the following:

— The household survey, although based on a smaller sample, reflects a larger segment of the population; the establishment survey excludes agriculture, the self-employed, unpaid family workers, private household workers, and members of the resident Armed Forces;

— The household survey includes people on unpaid leave among the employed; the establishment survey does not;

— The household survey is limited to those 16 years of age and older; the establishment survey is not limited by age;

— The household survey has no duplication of individuals, because each individual is counted only once; in the establishment survey, employees working at more than one job or otherwise appearing on more than one payroll would be counted separately for each appearance.

Other differences between the two surveys are described in "Comparing Employment Estimates from Household and Payroll Surveys," which may be obtained from the BLS upon request.

Seasonal adjustment

Over the course of a year, the size of the Nation's labor force and the levels of employment and unemployment undergo sharp fluctuations due to such seasonal events as changes in weather, reduced or expanded production, harvests, major holidays, and the opening and closing of schools. For example, the labor force increases by a large number each June, when schools close and many young people enter the job market. The effect of such seasonal variation can be very large; over the course of a year, for example, seasonality may account for as much as 95 percent of the month-to-month changes in unemployment.

Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make nonseasonal developments, such as declines in economic activity or increases in the participation of women in the labor force, easier to spot. To return to the school's-out example, the large number of people entering the labor force each June is likely to obscure any other changes that have taken place since May, making it difficult to determine if the level of economic activity has risen or declined. However, because the effect of students finishing school in previous years is known, the statistics for the current year can be adjusted to allow for a comparable change. Insofar as the seasonal adjustment is made correctly, the adjusted figure provides a more useful tool with which to analyze changes in economic activity.

Measures of labor force, employment, and unemployment contain components such as age and sex. Statistics for all employees, production workers, average weekly hours, and average hourly earnings include components based on the employer's industry. All these statistics can be seasonally adjusted either by adjusting the total or by adjusting each of the components and combining them. The second procedure usually yields more accurate information and is therefore followed by BLS. For example, the seasonally adjusted figure for the labor force is the sum of eight seasonally adjusted civilian employment components, plus the resident Armed Forces total (not adjusted for seasonality), and four seasonally adjusted unemployment components; the total for unemployment is the sum of the four unemployment components; and the overall unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the labor force.

The numerical factors used to make the seasonal adjustments are recalculated regularly. For the household survey, the factors are calculated for the January-June period and again for the July-December period. The January revision is applied to data that have been published over the previous 5 years. For the establishment survey, updated factors for seasonal adjustment are calculated only once a year, along with the introduction of new benchmarks which are discussed at the end of the next section.

Sampling variability

Statistics based on the household and establishment surveys are subject to sampling error, that is, the estimate of the number of people employed and the other estimates drawn from these surveys probably differ from the figures that would be obtained from a complete census, even if the same questionnaires and procedures were used. In the household survey, the amount of the differences can be expressed in terms of standard errors. The numerical value of a standard error depends upon the size of the sample, the results of the survey, and other factors. However, the numerical value is always such that the chances are approximately 68 out of 100 that an estimate based on the sample will differ by no more than the standard error from the results of a complete census. The chances are approximately 90 out of 100 that an estimate based on the sample will differ by no more than 1.6 times the standard error from the results of a complete census. At approximately the 90-percent level of confidence—the confidence limits used by BLS in its analyses—the error for the monthly change in total employment is on the order of plus or minus 328,000; for total unemployment it is 220,000; and, for the overall unemployment rate, it is 0.19 percentage point. These figures do not mean that the sample results are off by these magnitudes but, rather, that the chances are approximately 90 out of 100 that the "true" level or rate would not be expected to differ from the estimates by more than these amounts.

Sampling errors for monthly surveys are reduced when the data are cumulated for several months, such as quarterly or annually. Also, as a general rule, the smaller the estimate, the larger the sampling error. Therefore, relatively speaking, the estimate of the size of the labor force is subject to less error than is the estimate of the number unemployed. And, among the unemployed, the sampling error for the jobless rate of adult men, for example, is much smaller than is the error for the jobless rate of teenagers. Specifically, the error on monthly change in the jobless rate for men is .26 percentage point; for teenagers, it is 1.25 percentage points.

In the establishment survey, estimates for the 2 most current months are based on incomplete returns; for this reason, these estimates are labeled preliminary in the tables. When all the returns in the sample have been received, the estimates are revised. In other words, data for the month of September are published in preliminary form in October and November and in final form in December. To remove errors that build up over time, a comprehensive count of the employed is conducted each year. The results of this survey are used to establish new benchmarks—comprehensive counts of employment—against which month-to-month changes can be measured. The new benchmarks also incorporate changes in the classification of industries and allow for the formation of new establishments.

Additional statistics and other information

In order to provide a broad view of the Nation's employment situation, BLS regularly publishes a wide variety of data in this news release. More comprehensive statistics are contained in *Employment and Earnings*, published each month by BLS. It is available for $8.50 per issue or $22.00 per year from the U.S. Government Printing Office, Washington, D.C., 20204. A check or money order made out to the Superintendent of Documents must accompany all orders.

Employment and Earnings also provides approximations of the standard errors for the household survey data published in this release. For unemployment and other labor force categories, the standard errors appear in tables B through J of its "Explanatory Notes." Measures of the reliability of the data drawn from the establishment survey and the actual amounts of revision due to benchmark adjustments are provided in tables M, O, P, and Q of that publication.

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HOUSEHOLD DATA

Table A-1. Employment status of the population, including Armed Forces in the United States, by sex

(Numbers in thousands)

Employment status and sex	Not seasonally adjusted			Seasonally adjusted[1]					
	Nov. 1986	Oct. 1987	Nov. 1987	Nov. 1986	July 1987	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987
TOTAL									
Noninstitutional population[2]	183,114	185,052	185,225	183,114	184,805	184,738	184,904	185,052	185,225
Labor force[3]	120,374	122,485	122,366	120,439	121,872	122,038	121,804	122,102	122,371
Participation rate[4]	65.7	66.2	66.1	65.8	65.9	66.1	65.8	66.0	66.1
Total employed[5]	112,902	115,639	115,584	112,183	114,447	114,817	114,515	114,929	115,255
Employment-population ratio[6]	61.4	62.5	62.4	61.3	62.0	62.2	61.9	62.1	62.2
Resident Armed Forces	1,751	1,741	1,755	1,751	1,720	1,736	1,743	1,741	1,755
Civilian employed	110,751	113,898	113,809	110,432	112,727	113,081	112,772	113,187	113,500
Agriculture	3,078	3,297	3,020	3,215	3,219	3,092	3,170	3,283	3,167
Nonagricultural industries	107,673	110,601	110,789	107,217	109,508	109,989	109,602	109,903	110,333
Unemployed	7,672	6,845	6,802	8,243	7,224	7,221	7,089	7,174	7,116
Unemployment rate[7]	6.5	5.6	5.6	6.8	5.9	5.9	5.8	5.9	5.8
Not in labor force	62,740	62,567	62,859	62,668	62,933	62,700	63,100	62,950	62,854
Men, 16 years and over									
Noninstitutional population[2]	87,773	88,758	88,849	87,773	88,534	88,596	88,683	88,756	88,849
Labor force[3]	67,108	67,820	67,753	67,407	67,656	67,925	67,736	67,916	68,025
Participation rate[4]	76.5	76.4	76.3	76.8	76.4	76.7	76.4	76.5	76.6
Total employed[5]	62,747	64,272	64,084	62,833	63,715	63,918	63,639	64,024	64,179
Employment-population ratio[6]	71.5	72.4	72.1	71.6	72.0	72.1	72.1	72.1	72.2
Resident Armed Forces	1,592	1,580	1,593	1,592	1,561	1,575	1,581	1,580	1,593
Civilian employed	61,155	62,692	62,491	61,241	62,154	62,343	62,058	62,444	62,586
Unemployed	4,360	3,549	3,669	4,574	3,941	4,007	3,796	3,893	3,846
Unemployment rate[7]	6.5	5.2	5.4	6.8	5.8	5.9	5.6	5.7	5.7
Women, 16 years and over									
Noninstitutional population[2]	95,341	96,295	96,376	95,341	96,071	96,140	96,221	96,296	96,376
Labor force[3]	53,267	54,664	54,613	53,019	54,016	54,113	53,868	54,185	54,346
Participation rate[4]	55.9	56.8	56.7	55.6	56.2	56.3	56.0	56.3	56.4
Total employed[5]	49,754	51,367	51,480	49,350	50,733	50,899	50,876	50,904	51,076
Employment-population ratio[6]	52.2	53.3	53.4	51.8	52.8	52.9	52.8	52.9	53.0
Resident Armed Forces	159	161	162	159	159	161	162	161	162
Civilian employed	49,595	51,206	51,316	49,191	50,574	50,738	50,414	50,743	50,914
Unemployed	3,512	3,297	3,133	3,669	3,283	3,213	3,291	3,281	3,270
Unemployment rate[7]	6.6	6.0	5.7	6.9	6.1	5.9	6.1	6.1	6.0

[1] The population and Armed Forces figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

[2] Includes members of the Armed Forces stationed in the United States.

[3] Labor force as a percent of the noninstitutional population.

[4] Total employment as a percent of the noninstitutional population.

[5] Unemployment as a percent of the labor force (including the resident Armed Forces).

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HOUSEHOLD DATA

Table A-2. Employment status of the civilian population by sex and age

(Numbers in thousands)

Employment status, sex, and age	Not seasonally adjusted			Seasonally adjusted[1]					
	Nov. 1986	Oct. 1987	Nov. 1987	Nov. 1986	July 1987	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987
TOTAL									
Civilian noninstitutional population	181,383	183,311	183,470	181,383	182,885	183,002	183,161	183,311	183,470
Civilian labor force	118,623	120,744	120,611	118,675	119,952	120,302	119,961	120,361	120,816
Participation rate	65.4	65.9	65.7	65.4	65.6	65.7	65.4	65.7	65.7
Employed	110,751	113,898	113,809	110,432	112,727	113,081	112,772	113,187	113,500
Employment-population ratio[2]	61.1	62.1	62.0	60.9	61.6	61.8	61.6	61.7	61.9
Unemployed	7,872	6,845	6,802	8,243	7,224	7,221	7,089	7,174	7,116
Unemployment rate	6.6	5.7	5.6	6.9	6.0	6.0	5.9	6.0	5.9
Men, 20 years and over									
Civilian noninstitutional population	78,874	79,907	79,865	78,874	79,625	79,668	79,740	79,907	79,865
Civilian labor force	61,654	62,317	62,288	61,703	62,116	62,053	62,045	62,160	62,304
Participation rate	78.2	78.1	78.0	78.2	78.0	77.9	77.8	77.8	78.0
Employed	58,019	59,442	59,289	57,883	58,793	58,818	58,957	58,997	59,167
Employment-population ratio[2]	73.6	74.5	74.2	73.4	73.8	73.8	73.8	73.9	74.1
Agriculture	2,263	2,403	2,234	2,303	2,343	2,254	2,355	2,354	2,282
Nonagricultural industries	55,755	57,040	57,056	55,580	56,450	56,564	56,601	56,643	56,885
Unemployed	3,636	2,875	2,999	3,820	3,323	3,235	3,089	3,163	3,137
Unemployment rate	5.9	4.6	4.8	6.2	5.4	5.2	5.0	5.1	5.0
Women, 20 years and over									
Civilian noninstitutional population	87,933	88,843	88,923	87,933	88,632	88,685	88,795	88,843	88,923
Civilian labor force	49,458	50,721	50,690	49,043	49,971	49,989	49,862	50,098	50,256
Participation rate	56.2	57.1	57.0	55.8	56.4	56.4	56.2	56.4	56.5
Employed	46,597	48,076	48,166	46,067	47,288	47,324	47,179	47,493	47,634
Employment-population ratio[2]	53.0	54.1	54.2	52.4	53.4	53.4	53.1	53.5	53.6
Agriculture	640	670	624	675	619	603	585	648	655
Nonagricultural industries	45,958	47,407	47,542	45,392	46,669	46,722	46,594	45,845	46,978
Unemployed	2,860	2,644	2,525	2,976	2,683	2,664	2,703	2,605	2,622
Unemployment rate	5.8	5.2	5.0	6.1	5.4	5.3	5.4	5.2	5.2
Both sexes, 16 to 19 years									
Civilian noninstitutional population	14,557	14,561	14,683	14,557	14,628	14,649	14,637	14,661	14,683
Civilian labor force	7,511	7,706	7,633	7,929	7,865	8,260	7,933	8,103	8,056
Participation rate	51.6	52.6	52.1	54.5	53.8	56.4	54.2	55.3	54.9
Employed	6,135	6,379	6,354	6,482	6,647	6,939	6,636	6,697	6,689
Employment-population ratio[2]	42.1	43.5	43.3	44.5	45.4	47.4	45.3	45.7	45.7
Agriculture	174	225	162	237	258	236	230	282	230
Nonagricultural industries	5,960	6,155	6,192	6,245	6,389	6,703	6,406	6,415	6,459
Unemployed	1,376	1,327	1,279	1,447	1,218	1,321	1,297	1,406	1,357
Unemployment rate	18.3	17.2	16.8	18.2	15.5	16.0	16.3	17.4	16.8

[1] The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

[2] Civilian employment as a percent of the civilian noninstitutional population.

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Table A-3. Employment status of the civilian population by race, sex, age, and Hispanic origin

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	Not seasonally adjusted			Seasonally adjusted					
	Nov. 1988	Oct. 1987	Nov. 1987	Nov. 1988	July 1987	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987
WHITE									
Civilian noninstitutional population	155,979	157,342	157,449	155,979	157,050	157,134	157,242	157,342	157,449
Civilian labor force	102,455	103,934	103,729	102,455	103,272	103,614	103,276	103,640	103,717
Participation rate	65.7	66.1	65.9	65.7	65.8	65.9	65.7	65.9	65.9
Employed	96,555	98,882	98,698	96,281	97,958	98,299	97,995	98,284	98,457
Employment-population ratio[1]	61.9	62.8	62.7	61.7	62.4	62.6	62.3	62.5	62.5
Unemployed	5,899	5,053	5,031	6,174	5,314	5,315	5,283	5,357	5,260
Unemployment rate	5.8	4.9	4.9	6.0	5.1	5.1	5.1	5.2	5.1
Men, 20 years and over									
Civilian labor force	53,930	54,399	54,349	54,015	54,214	54,164	54,152	54,267	54,412
Participation rate	76.5	78.4	78.3	78.7	78.3	78.2	78.1	78.4	78.4
Employed	51,163	52,167	52,050	51,089	51,982	51,714	51,771	51,956	51,998
Employment-population ratio[1]	74.5	75.2	75.0	74.4	74.7	74.7	74.7	74.8	74.9
Unemployed	2,768	2,232	2,299	2,926	2,232	2,449	2,382	2,311	2,414
Unemployment rate	5.1	4.1	4.2	5.4	4.7	4.5	4.4	4.6	4.4
Women, 20 years and over									
Civilian labor force	41,951	42,943	42,850	41,540	42,290	42,418	42,312	42,352	42,439
Participation rate	55.6	56.5	56.3	55.1	55.7	55.9	55.7	55.7	55.8
Employed	39,893	41,089	41,058	39,399	40,379	40,535	40,395	40,522	40,571
Employment-population ratio[1]	52.9	54.0	54.0	52.3	53.2	53.4	53.2	53.3	53.3
Unemployed	2,058	1,854	1,792	2,141	1,902	1,882	1,917	1,830	1,867
Unemployment rate	4.9	4.3	4.2	5.2	4.5	4.4	4.5	4.3	4.4
Both sexes, 16 to 19 years									
Civilian labor force	6,573	6,592	6,531	6,900	6,778	7,033	6,814	6,822	6,867
Participation rate	55.2	55.2	54.7	58.0	56.6	58.8	57.0	56.9	57.5
Employed	5,500	5,626	5,590	5,793	5,698	6,049	5,829	5,906	5,888
Employment-population ratio[1]	46.2	47.1	46.8	48.7	48.3	50.6	48.8	49.5	49.3
Unemployed	1,073	967	941	1,107	980	984	985	1,016	979
Unemployment rate	16.3	14.7	14.4	16.0	13.0	14.0	14.5	14.7	14.3
Men	16.8	14.8	15.1	16.3	13.0	15.4	15.3	15.0	14.8
Women	15.8	14.6	13.7	15.7	13.0	12.5	13.6	14.3	13.7
BLACK									
Civilian noninstitutional population	20,120	20,453	20,482	20,120	20,373	20,396	20,426	20,453	20,482
Civilian labor force	12,695	13,160	13,178	12,719	13,047	13,194	13,027	13,167	13,211
Participation rate	63.1	64.3	64.3	63.2	64.0	64.7	63.8	64.4	64.5
Employed	10,946	11,582	11,632	10,910	11,401	11,563	11,427	11,562	11,607
Employment-population ratio[1]	54.4	56.6	56.8	54.2	56.0	56.7	55.9	56.6	56.7
Unemployed	1,749	1,578	1,545	1,809	1,647	1,630	1,599	1,606	1,604
Unemployment rate	13.8	12.0	11.7	14.2	12.6	12.4	12.3	12.0	12.1
Men, 20 years and over									
Civilian labor force	5,951	6,019	6,053	5,934	6,009	6,079	6,025	6,012	6,036
Participation rate	74.8	74.3	74.6	74.5	75.4	75.2	74.4	74.2	74.4
Employed	5,209	5,451	5,454	5,171	5,404	5,431	5,425	5,435	5,421
Employment-population ratio[1]	65.4	67.3	67.2	65.0	66.9	67.2	67.0	67.1	66.8
Unemployed	742	569	599	763	606	647	600	577	614
Unemployment rate	12.5	9.5	9.9	12.9	11.3	10.7	10.0	9.6	10.2
Women, 20 years and over									
Civilian labor force	5,977	6,241	6,252	5,943	6,125	6,120	6,074	6,181	6,224
Participation rate	60.7	61.3	61.3	59.3	60.4	60.3	59.8	60.8	61.1
Employed	5,233	5,533	5,584	5,200	5,428	5,428	5,350	5,511	5,561
Employment-population ratio[1]	52.3	54.4	54.9	51.9	53.5	53.5	52.7	54.2	54.6
Unemployed	738	707	658	743	699	692	723	680	664
Unemployment rate	12.4	11.3	10.5	12.5	11.4	11.3	11.9	11.0	10.7
Both sexes, 16 to 19 years									
Civilian labor force	767	900	872	842	833	895	926	964	951
Participation rate	35.8	41.4	40.1	39.3	38.4	45.9	42.7	44.4	43.7
Employed	498	597	585	539	571	704	652	636	625
Employment-population ratio[1]	23.3	27.5	26.9	25.1	26.3	32.5	30.0	29.3	28.7
Unemployed	269	302	287	303	262	191	276	328	326
Unemployment rate	35.0	33.6	32.9	36.0	31.5	29.2	29.7	34.0	34.3
Men	35.8	32.5	32.1	35.0	31.5	32.6	30.9	32.2	32.1
Women	34.5	34.7	33.7	37.0	31.4	25.3	28.7	35.8	36.7

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Table A-3. Employment status of the civilian population by race, sex, age, and Hispanic origin—Continued

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	Not seasonally adjusted			Seasonally adjusted[1]					
	Nov. 1986	Oct. 1987	Nov. 1987	Nov. 1986	July 1987	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987
HISPANIC ORIGIN									
Civilian noninstitutional population	12,505	13,003	13,043	12,505	12,887	12,925	12,965	13,003	13,043
Civilian labor force	8,253	8,695	8,788	8,225	8,411	8,544	8,568	8,653	8,774
Participation rate	66.0	66.9	67.4	65.8	65.3	66.1	66.1	66.5	67.3
Employed	7,476	7,991	8,002	7,437	7,744	7,864	7,868	7,935	7,978
Employment-population ratio[2]	59.8	61.5	61.4	59.5	60.1	60.8	60.7	61.0	61.2
Unemployed	777	704	786	789	667	680	699	718	796
Unemployment rate	9.4	8.1	8.9	9.6	7.9	8.0	8.2	8.3	9.1

[1] The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

[2] Civilian employment as a percent of the civilian noninstitutional population.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented and Hispanics are included in both the white and black population groups.

Table A-4. Selected employment indicators

(In thousands)

Category	Not seasonally adjusted			Seasonally adjusted					
	Nov. 1986	Oct. 1987	Nov. 1987	Nov. 1986	July 1987	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987
PERSONS AT WORK PART TIME[1]									
Civilian employed, 16 years and over	110,751	113,898	113,809	110,432	112,727	113,081	112,772	113,197	113,500
Married men, spouse present	40,099	40,905	40,879	39,952	40,241	40,260	40,370	40,580	40,716
Married women, spouse present	27,954	28,685	28,668	27,333	28,425	28,196	27,966	28,013	28,098
Women who maintain families	5,965	6,174	6,218	6,041	6,013	6,108	6,164	6,205	6,281
CHARACTERISTIC									
Agriculture:									
Wage and salary workers	1,489	1,673	1,492	1,582	1,619	1,566	1,615	1,716	1,589
Self-employed workers	1,410	1,487	1,384	1,425	1,429	1,363	1,417	1,441	1,399
Unpaid family workers	179	136	144	198	154	159	134	136	159
Nonagricultural industries:									
Wage and salary workers	99,127	101,883	102,245	98,869	100,838	101,334	101,221	101,503	102,056
Government	16,602	17,288	17,307	16,457	16,931	16,780	16,915	17,083	17,170
Private industries	82,526	84,595	84,938	82,412	83,907	84,574	84,306	84,420	84,886
Private households	1,145	1,257	1,244	1,183	1,224	1,172	1,098	1,235	1,297
Other industries	81,381	83,338	83,694	81,229	82,683	83,402	83,218	83,185	83,589
Self-employed workers	8,292	8,478	8,316	8,179	8,205	8,216	8,184	8,320	8,097
Unpaid family workers	254	240	228	252	298	250	300	238	226
MAJOR INDUSTRY AND CLASS OF WORKER									
All industries:									
Part time for economic reasons	5,414	5,129	5,430	5,563	5,508	5,262	5,241	5,416	5,575
Slack work	2,563	2,346	2,504	2,510	2,456	2,515	2,212	2,389	2,455
Could only find part-time work	2,546	2,496	2,569	2,714	2,722	2,494	2,702	2,664	2,739
Voluntary part time	15,185	15,500	15,639	14,021	14,422	14,634	14,313	14,459	14,494
Nonagricultural industries:									
Part time for economic reasons	5,176	4,856	5,152	5,319	5,235	4,998	4,968	5,101	5,290
Slack work	2,409	2,162	2,293	2,366	2,295	2,306	2,038	2,211	2,250
Could only find part-time work	2,478	2,412	2,510	2,626	2,634	2,433	2,528	2,555	2,659
Voluntary part time	14,759	15,058	15,232	13,567	13,946	14,168	13,930	14,007	14,039

[1] Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial dispute.

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Table A-5. Range of unemployment measures based on varying definitions of unemployment and the labor force, seasonally adjusted

(Percent)

Measure	Quarterly averages					Monthly data		
	1986		1987			1987		
	III	IV	I	II	III	Sept.	Oct.	Nov.
U-1 Persons unemployed 15 weeks or longer as a percent of the civilian labor force	1.9	1.8	1.8	1.7	1.9	1.8	1.5	1.5
U-2 Job losers as a percent of the civilian labor force	3.4	3.3	3.3	3.0	2.9	2.9	2.9	2.8
U-3 Unemployed persons 25 years and over as a percent of the civilian labor force	5.4	5.4	5.1	4.7	4.6	4.6	4.6	4.5
U-4 Unemployed full-time jobseekers as a percent of the full-time civilian labor force	6.6	6.5	6.3	5.8	5.6	5.4	5.5	5.5
U-5a Total unemployed as a percent of the labor force, including the resident Armed Forces	6.8	6.8	6.6	6.1	5.9	5.8	5.9	5.8
U-5b Total unemployed as a percent of the civilian labor force	6.9	6.9	6.7	6.2	6.0	5.9	6.0	5.9
U-6 Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/2 total on part time for economic reasons as a percent of the civilian labor force less 1/2 of the part-time labor force	9.3	9.2	9.0	8.4	8.2	8.0	8.2	8.2
U-7 Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/2 total on part time for economic reasons plus discouraged workers as a percent of the civilian labor force plus discouraged workers less 1/2 of the part-time labor force	10.2	10.2	10.0	9.3	9.0	N.A.	N.A.	N.A.

N.A. = not available.

Table A-6. Selected unemployment indicators, seasonally adjusted

Category	Number of unemployed persons (in thousands)			Unemployment rates[1]					
	Nov. 1986	Oct. 1987	Nov. 1987	Nov. 1986	July 1987	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987
CHARACTERISTIC									
Total, 16 years and over	8,243	7,174	7,116	6.9	6.0	6.0	5.9	6.0	5.9
Men, 16 years and over	4,574	3,893	3,846	6.9	6.0	6.0	5.7	5.9	5.8
Men, 20 years and over	3,820	3,163	3,137	6.2	5.4	5.2	5.0	5.1	5.0
Women, 16 years and over	3,669	3,281	3,270	6.9	6.1	6.0	6.1	6.1	6.0
Women, 20 years and over	2,976	2,605	2,622	6.1	5.4	5.3	5.4	5.2	5.2
Both sexes, 16 to 19 years	1,447	1,406	1,357	19.2	15.5	16.0	16.3	17.4	16.8
Married men, spouse present	1,862	1,576	1,494	4.5	3.8	3.7	3.6	3.7	3.5
Married women, spouse present	1,429	1,208	1,251	5.0	4.2	4.3	4.2	4.1	4.3
Women who maintain families	660	610	573	9.7	9.4	9.0	8.8	9.0	8.4
Full-time workers	6,673	5,718	5,680	6.8	5.7	5.8	5.4	5.5	5.5
Part-time workers	1,538	1,465	1,407	9.1	7.9	8.2	8.5	8.5	8.1
Labor force time lost[2]	—	—	—	7.7	6.9	6.8	6.7	6.8	6.9
INDUSTRY									
Nonagricultural private wage and salary workers	6,190	5,262	5,281	7.0	6.1	5.9	5.9	5.9	5.8
Mining	136	77	57	14.5	7.8	8.9	7.0	8.5	6.3
Construction	955	694	656	15.1	10.7	11.2	12.1	11.4	10.5
Manufacturing	1,541	1,253	1,153	7.1	6.0	5.5	5.7	5.7	5.3
Durable goods	960	669	608	6.6	6.1	5.5	5.6	5.2	4.8
Nondurable goods	581	584	545	7.9	5.9	5.5	5.9	6.5	6.1
Transportation and public utilities	272	267	274	4.4	4.4	4.3	4.0	4.4	4.4
Wholesale and retail trade	1,821	1,481	1,564	7.2	6.8	7.0	6.4	6.4	6.9
Finance and service industries	1,965	1,490	1,557	5.4	5.1	4.6	4.9	4.7	4.8
Government workers	611	581	630	3.8	3.4	3.9	3.4	3.3	3.5
Agricultural wage and salary workers	177	209	206	10.1	11.3	10.8	9.3	10.9	11.5

[1] Unemployment as a percent of the civilian labor force.

[2] Aggregate hours lost by the unemployed and persons on part time for economic reasons as a percent of potentially available labor force hours.

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Table A-7. Duration of unemployment

(Numbers in thousands)

Weeks of unemployment	Not seasonally adjusted			Seasonally adjusted					
	Nov. 1986	Oct. 1987	Nov. 1987	Nov. 1986	July 1987	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987
DURATION									
Less than 5 weeks	3,261	3,211	3,131	3,382	3,168	3,197	3,230	3,227	3,225
5 to 14 weeks	2,597	2,032	2,039	2,613	2,141	2,170	1,932	2,121	2,043
15 weeks and over	1,994	1,602	1,633	2,217	1,907	1,864	1,920	1,758	1,810
15 to 26 weeks	914	712	770	1,045	945	814	909	799	874
27 weeks and over	1,080	891	863	1,172	962	1,070	1,011	959	936
Average (mean) duration, in weeks	15.0	13.7	14.0	14.8	14.0	14.3	14.2	14.0	13.8
Median duration, in weeks	6.8	5.7	5.9	7.0	6.7	6.4	5.7	6.2	6.1
PERCENT DISTRIBUTION									
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	41.7	46.9	46.0	41.2	43.9	44.1	45.6	45.4	45.6
5 to 14 weeks	33.0	29.7	30.0	31.8	29.7	29.9	27.3	29.8	28.9
15 weeks and over	25.3	23.4	24.0	27.0	26.4	26.0	27.1	24.7	25.6
15 to 26 weeks	11.6	10.4	11.3	12.7	13.1	11.2	12.8	11.2	12.4
27 weeks and over	13.7	13.0	12.7	14.3	13.3	14.8	14.3	13.5	13.2

Table A-8. Reason for unemployment

(Numbers in thousands)

Reasons	Not seasonally adjusted			Seasonally adjusted					
	Nov. 1986	Oct. 1987	Nov. 1987	Nov. 1986	July 1987	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987
NUMBER OF UNEMPLOYED									
Job losers	3,773	3,082	3,171	3,947	3,522	3,339	3,321	3,447	3,334
On layoff	986	768	825	1,073	918	850	810	956	893
Other job losers	2,787	2,314	2,346	2,874	2,604	2,489	2,511	2,491	2,442
Job leavers	1,090	1,030	950	1,056	1,007	1,006	995	956	910
Reentrants	2,035	1,873	1,929	2,119	1,913	1,997	1,885	1,794	2,005
New entrants	975	861	752	1,076	901	829	883	981	851
PERCENT DISTRIBUTION									
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	47.9	45.0	46.6	48.1	48.6	46.6	46.9	48.2	47.0
On layoff	12.5	11.2	12.1	13.1	12.7	11.9	11.4	13.4	12.6
Other job losers	35.4	33.8	34.5	35.1	36.9	34.7	35.4	34.8	34.4
Job leavers	13.8	15.0	14.0	12.9	13.9	14.0	14.0	13.4	12.8
Reentrants	25.8	27.4	28.4	25.8	26.4	27.9	26.6	25.1	28.2
New entrants	12.4	12.6	11.1	13.1	11.1	11.6	12.5	13.4	12.0
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE									
Job losers	3.1	2.5	2.6	3.3	2.9	2.8	2.8	2.9	2.8
Job leavers	.9	.9	.8	.9	.8	.8	.8	.8	.8
Reentrants	1.7	1.6	1.6	1.8	1.6	1.7	1.6	1.5	1.7
New entrants	.8	.7	.6	.9	.7	.7	.7	.8	.7

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Table A-8. Unemployed persons by sex and age, seasonally adjusted

Sex and age	Number of unemployed persons (in thousands)			Unemployment rates[1]					
	Nov. 1986	Oct. 1987	Nov. 1987	Nov. 1986	July 1987	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987
Total, 16 years and over	8,243	7,174	7,116	6.9	6.0	6.0	5.9	6.0	5.9
16 to 24 years	3,009	2,661	2,664	12.9	11.7	11.8	11.7	11.8	11.7
16 to 19 years	1,447	1,406	1,357	18.2	15.5	16.0	16.3	17.4	16.8
16 to 17 years	886	734	662	20.6	17.1	19.0	17.4	20.9	19.7
18 to 19 years	788	672	703	16.7	13.9	14.7	15.4	14.6	14.9
20 to 24 years	1,556	1,275	1,307	10.2	9.8	9.1	9.3	8.7	8.9
25 years and over	5,230	4,498	4,439	5.5	4.7	4.7	4.6	4.6	4.5
25 to 54 years	4,630	4,016	3,894	5.8	5.0	5.0	4.7	4.9	4.7
55 years and over	571	478	508	3.8	3.1	3.2	3.4	3.2	3.3
Men, 16 years and over	4,574	3,893	3,846	6.9	6.0	6.0	5.7	5.9	5.8
16 to 24 years	1,835	1,424	1,420	13.4	11.9	12.4	11.9	12.0	12.0
16 to 19 years	754	730	708	18.3	15.5	18.0	17.3	17.5	17.2
16 to 17 years	386	387	363	21.3	16.6	20.8	18.3	21.5	21.0
18 to 19 years	368	344	348	16.2	13.8	16.3	16.0	14.4	14.4
20 to 24 years	881	694	711	10.9	10.0	9.3	9.1	9.1	9.3
25 years and over	2,931	2,471	2,420	5.5	4.7	4.7	4.4	4.5	4.4
25 to 54 years	2,568	2,186	2,088	5.7	4.9	4.9	4.6	4.8	4.6
55 years and over	361	277	317	4.1	3.4	3.4	3.2	3.1	3.8
Women, 16 years and over	3,669	3,281	3,270	6.9	6.1	6.0	6.1	6.1	6.0
16 to 24 years	1,370	1,257	1,244	12.4	11.6	10.7	11.8	11.5	11.4
16 to 19 years	693	676	648	18.2	15.4	13.9	15.4	17.2	16.5
16 to 17 years	320	347	299	19.8	17.7	15.3	16.5	20.3	18.3
18 to 19 years	380	328	355	17.2	14.0	12.9	14.6	14.8	15.4
20 to 24 years	677	581	596	9.4	9.5	8.9	9.5	8.3	8.5
25 years and over	2,299	2,028	2,019	5.5	4.7	4.7	4.7	4.7	4.7
25 to 54 years	2,062	1,829	1,806	5.8	5.0	5.0	4.9	5.0	4.9
55 years and over	210	201	190	3.4	2.6	2.9	3.7	3.2	3.0

[1] Unemployment as a percent of the civilian labor force.

Table A-10. Employment status of black and other workers

(Numbers in thousands)

Employment status	Not seasonally adjusted			Seasonally adjusted[1]					
	Nov. 1986	Oct. 1987	Nov. 1987	Nov. 1986	July 1987	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987
Civilian noninstitutional population	25,385	25,969	26,021	25,385	25,826	25,868	25,919	25,969	26,021
Civilian labor force	16,169	16,809	16,882	16,192	16,632	16,705	16,566	16,775	16,929
Participation rate	63.7	64.7	64.9	63.8	64.4	64.6	63.9	64.6	65.1
Employed	14,195	15,017	15,112	14,137	14,750	14,812	14,774	14,964	15,075
Employment-population ratio[2]	55.9	57.8	58.1	55.7	57.1	57.3	57.0	57.6	57.9
Unemployed	1,973	1,793	1,771	2,055	1,882	1,893	1,792	1,810	1,854
Unemployment rate	12.2	10.7	10.5	12.7	11.3	11.3	10.8	10.8	11.0
Not in labor force	9,216	9,159	9,139	9,193	9,194	9,163	9,353	9,194	9,092

[1] The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

[2] Civilian employment as a percent of the civilian noninstitutional population.

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Table A-11. Occupational status of the employed and unemployed, not seasonally adjusted

(Numbers in thousands)

Occupation	Civilian employed		Unemployed		Unemployment rate	
	Nov. 1986	Nov. 1987	Nov. 1986	Nov. 1987	Nov. 1986	Nov. 1987
Total, 16 years and over[1]	110,751	113,809	7,872	6,802	6.6	5.6
Managerial and professional specialty	27,150	28,266	627	584	2.3	2.0
Executive, administrative, and managerial	12,848	13,444	344	355	2.6	2.6
Professional specialty	14,302	14,822	283	229	1.9	1.5
Technical, sales, and administrative support	34,920	35,461	1,647	1,518	4.5	4.1
Technicians and related support	3,376	3,346	104	84	3.0	2.5
Sales occupations	13,621	13,577	640	633	4.5	4.5
Administrative support, including clerical	17,922	18,538	903	801	4.8	4.1
Service occupations	14,756	15,199	1,309	1,236	8.1	7.5
Private household	928	965	62	46	6.2	4.5
Protective service	1,748	1,939	87	97	4.7	4.8
Service, except private household and protective	12,080	12,296	1,161	1,093	8.8	8.2
Precision production, craft, and repair	13,582	13,712	956	750	6.6	5.2
Mechanics and repairers	4,350	4,456	219	163	4.8	3.5
Construction trades	5,011	5,108	483	398	8.8	7.2
Other precision production, craft, and repair	4,221	4,148	253	189	5.7	4.4
Operators, fabricators, and laborers	17,076	17,936	2,048	1,627	10.7	8.3
Machine operators, assemblers, and inspectors	7,868	8,172	885	686	10.1	7.7
Transportation and material moving occupations	4,667	4,867	361	293	7.1	5.7
Handlers, equipment c[illegible]rs, helpers, and laborers	4,520	4,897	802	647	15.1	11.7
Construction laborers	713	809	235	190	24.8	19.0
Other handlers, equip[illegible]aners, helpers, and laborers	3,807	4,088	567	458	13.0	10.1
Farming, forestry, and fishing	3,267	3,235	270	296	7.6	8.4

[1] Persons with no previous work experience and those whose last job was in the Armed Forces are included in the unemployed total.

Table A-12. Employment status of male Vietnam-era veterans and nonveterans by age, not seasonally adjusted

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
			Total		Employed		Unemployed			
							Number		Percent of labor force	
	Nov. 1986	Nov. 1987	Nov. 1986	Nov. 1987	Nov. 1986	Nov. 1987	Nov. 1986	Nov. 1987	Nov. 1986	Nov. 1987
VIETNAM-ERA VETERANS										
Total, 30 years and over	7,785	7,861	7,289	7,257	6,980	6,916	309	339	4.2	4.7
30 to 44 years	6,331	6,112	6,087	5,796	5,804	5,507	283	289	4.6	5.0
30 to 34 years	1,065	832	1,020	790	948	716	72	74	7.1	9.4
35 to 39 years	2,894	2,439	2,790	2,319	2,654	2,227	136	92	4.9	4.0
40 to 44 years	2,372	2,841	2,277	2,687	2,202	2,564	75	123	3.3	4.6
45 years and over	1,454	1,749	1,202	1,461	1,176	1,411	26	50	2.2	3.4
NONVETERANS										
Total, 30 to 44 years	18,783	19,819	17,791	18,776	16,803	18,031	988	745	5.6	4.0
30 to 34 years	8,638	8,949	8,212	8,513	7,756	8,134	456	379	5.6	4.5
35 to 39 years	5,909	6,420	5,578	6,071	5,282	5,861	296	210	5.3	3.5
40 to 44 years	4,236	4,450	4,001	4,192	3,765	4,036	236	156	5.9	3.7

NOTE: Male Vietnam-era veterans are men who served in the Armed Forces between August 5, 1964 and May 7, 1975. Nonveterans are men who have never served in the Armed Forces; published data are limited to those 30 to 44 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population. Data for 25- to 29-year-old veterans are no longer shown in this table because the group is rapidly disppearing (into the 30-34 age category) and the numbers remaining for some labor force categories are not large enough to warrant their continued publication.

Table A-13. Employment status of the civilian population for eleven large States

(Numbers in thousands)

State and employment status	Not seasonally adjusted[1]			Seasonally adjusted[2]					
	Nov. 1986	Oct. 1987	Nov. 1987	Nov. 1986	July 1987	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987
California									
Civilian noninstitutional population	20,275	20,695	20,731	20,275	20,562	20,624	20,660	20,695	20,731
Civilian labor force	13,545	13,836	13,918	13,540	13,819	13,775	13,823	13,801	13,928
Employed	12,660	13,065	13,201	12,625	13,064	13,036	13,026	12,979	13,191
Unemployed	885	771	717	915	755	739	797	822	737
Unemployment rate	6.5	5.6	5.1	6.8	5.5	5.4	5.8	6.0	5.3
Florida									
Civilian noninstitutional population	9,263	9,500	9,521	9,263	9,441	9,460	9,480	9,500	9,521
Civilian labor force	5,706	5,962	5,929	5,724	5,899	5,851	5,868	5,981	5,946
Employed	5,386	5,666	5,626	5,404	5,587	5,519	5,574	5,679	5,637
Unemployed	320	296	303	320	312	332	294	282	309
Unemployment rate	5.6	5.0	5.1	5.6	5.3	5.7	5.0	4.7	5.2
Illinois									
Civilian noninstitutional population	8,664	8,688	8,690	8,964	8,687	8,686	8,687	8,688	8,690
Civilian labor force	5,631	5,851	5,703	5,640	5,778	5,819	5,804	5,826	5,713
Employed	5,240	5,483	5,343	5,222	5,356	5,409	5,434	5,446	5,322
Unemployed	391	368	361	418	422	410	370	382	391
Unemployment rate	6.9	6.3	6.3	7.4	7.3	7.0	6.4	6.6	6.8
Massachusetts									
Civilian noninstitutional population	4,557	4,575	4,576	4,557	4,573	4,573	4,574	4,575	4,576
Civilian labor force	3,051	3,097	3,085	3,043	3,069	3,097	3,051	3,107	3,079
Employed	2,940	3,014	3,013	2,922	2,993	3,005	2,975	3,007	2,997
Unemployed	111	84	72	121	76	92	76	100	82
Unemployment rate	3.6	2.7	2.3	4.0	2.5	3.0	2.5	3.2	2.7
Michigan									
Civilian noninstitutional population	6,882	6,944	6,949	6,882	6,931	6,934	6,939	6,944	6,949
Civilian labor force	4,470	4,518	4,533	4,472	4,503	4,638	4,606	4,532	4,527
Employed	4,111	4,208	4,199	4,099	4,129	4,231	4,246	4,205	4,177
Unemployed	359	310	335	373	374	407	360	327	350
Unemployment rate	8.0	6.9	7.4	8.3	8.3	8.8	7.8	7.2	7.7
New Jersey									
Civilian noninstitutional population	5,942	5,999	6,003	5,942	5,987	5,990	5,994	5,999	6,003
Civilian labor force	3,887	3,952	3,962	3,914	3,930	3,986	3,916	3,965	3,985
Employed	3,729	3,808	3,834	3,737	3,771	3,815	3,740	3,812	3,843
Unemployed	158	144	129	177	159	171	176	153	142
Unemployment rate	4.1	3.6	3.2	4.5	4.0	4.3	4.5	3.9	3.6
New York									
Civilian noninstitutional population	13,742	13,786	13,788	13,742	13,782	13,781	13,784	13,786	13,788
Civilian labor force	8,402	8,534	8,590	8,378	8,481	8,526	8,392	8,480	8,584
Employed	7,953	8,118	8,167	7,895	8,106	8,145	8,012	8,057	8,134
Unemployed	449	416	423	483	375	381	380	423	450
Unemployment rate	5.3	4.9	4.9	5.8	4.4	4.5	4.5	5.0	5.2
North Carolina									
Civilian noninstitutional population	4,785	4,861	4,867	4,785	4,843	4,848	4,854	4,861	4,867
Civilian labor force	3,204	3,354	3,336	3,201	3,322	3,306	3,313	3,350	3,336
Employed	3,031	3,225	3,202	3,029	3,171	3,165	3,182	3,218	3,205
Unemployed	174	129	134	172	151	141	131	132	131
Unemployment rate	5.4	3.9	4.0	5.4	4.5	4.3	4.0	3.9	3.9
Ohio									
Civilian noninstitutional population	8,112	8,138	8,140	8,112	8,136	8,136	8,137	8,138	8,140
Civilian labor force	5,282	5,221	5,263	5,264	5,240	5,205	5,148	5,176	5,251
Employed	4,894	4,920	4,959	4,875	4,868	4,841	4,865	4,876	4,942
Unemployed	388	301	303	389	372	364	283	300	309
Unemployment rate	7.3	5.8	5.8	7.4	7.1	7.0	5.5	5.8	5.9

HOUSEHOLD DATA

Table A-13. Employment status of the civilian population for eleven large States—Continued

(Numbers in thousands)

State and employment status	Not seasonally adjusted[1]			Seasonally adjusted[2]					
	Nov. 1986	Oct. 1987	Nov. 1987	Nov. 1986	July 1987	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987
Pennsylvania									
Civilian noninstitutional population	9,250	9,288	9,291	9,250	9,283	9,283	9,286	9,288	9,291
Civilian labor force	5,600	5,787	5,716	5,557	5,616	5,697	5,675	5,738	5,687
Employed	5,266	5,480	5,417	5,212	5,295	5,383	5,359	5,400	5,372
Unemployed	334	307	299	345	321	314	316	338	315
Unemployment rate	6.0	5.3	5.2	6.2	5.7	5.5	5.6	5.9	5.5
Texas									
Civilian noninstitutional population	12,069	12,282	12,300	12,069	12,231	12,246	12,264	12,282	12,300
Civilian labor force	8,276	8,409	8,589	8,301	8,456	8,546	8,401	8,390	8,573
Employed	7,545	7,791	7,895	7,508	7,753	7,828	7,685	7,737	7,848
Unemployed	731	618	674	793	703	718	716	653	725
Unemployment rate	8.8	7.4	7.9	9.6	8.3	8.4	8.5	7.8	8.5

[1] These are the official Bureau of Labor Statistics' estimates used in the administration of Federal fund allocation programs.

[2] The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and the seasonally adjusted columns.

ESTABLISHMENT DATA

Table B-1. Employees on nonagricultural payrolls by industry

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted					
	Nov. 1986	Sept. 1987	Oct. 1987p	Nov. 1987p	Nov. 1986	July 1987	Aug. 1987	Sept. 1987	Oct. 1987p	Nov. 1987p
Total	101,234	102,959	103,779	104,095	100,415	102,186	102,375	102,434	102,970	103,244
Total private	84,000	86,181	86,961	86,503	83,515	85,106	85,229	85,386	85,766	85,998
Goods-producing	24,828	25,411	25,439	25,158	24,630	24,830	24,886	24,917	25,053	25,152
Mining	736	768	766	766	730	744	751	759	764	760
Oil and gas extraction	416.5	435.9	443.4	445.1	412	430	434	439	443	440
Construction	5,078	5,303	5,311	5,210	4,946	5,002	5,006	4,989	5,044	5,078
General building contractors	1,322.8	1,321.6	1,329.0	1,316.2	1,289	1,261	1,262	1,260	1,273	1,283
Manufacturing	19,014	19,348	19,352	19,383	18,954	19,104	19,129	19,169	19,245	19,314
Production workers	12,968	13,241	13,231	13,253	12,879	13,020	13,038	13,072	13,129	13,193
Durable goods	11,206	11,338	11,361	11,391	11,174	11,195	11,248	11,268	11,320	11,356
Production workers	7,415	7,535	7,569	7,599	7,385	7,425	7,475	7,494	7,530	7,568
Lumber and wood products	723.7	761.8	754.3	744.3	723	740	736	740	741	744
Furniture and fixtures	504.2	521.8	527.8	531.6	499	518	518	520	524	526
Stone, clay, and glass products	586.3	595.7	594.4	590.4	582	582	582	581	583	586
Primary metal industries	737.5	763.0	762.5	767.9	733	750	756	764	769	773
Blast furnaces and basic steel products	233.9	281.0	281.6	283.5	260	277	278	283	286	288
Fabricated metal products	1,426.5	1,440.8	1,447.4	1,454.2	1,419	1,424	1,425	1,429	1,439	1,447
Machinery, except electrical	2,013.0	2,050.5	2,058.2	2,068.1	2,015	2,033	2,044	2,053	2,062	2,070
Electrical and electronic equipment	2,133.3	2,104.8	2,114.2	2,118.9	2,119	2,088	2,095	2,096	2,110	2,115
Transportation equipment	2,032.9	2,026.5	2,023.0	2,032.1	2,023	1,995	2,028	2,018	2,021	2,020
Motor vehicles and equipment	868.9	864.3	861.8	865.5	858	816	848	837	839	839
Instruments and related products	699.8	695.8	696.1	700.4	700	695	695	695	697	700
Miscellaneous manufacturing	368.1	378.8	383.8	383.3	361	370	371	372	374	375
Nondurable goods	7,810	8,010	7,991	7,991	7,780	7,909	7,881	7,901	7,925	7,958
Production workers	5,525	5,686	5,662	5,656	5,494	5,595	5,563	5,578	5,599	5,625
Food and kindred products	1,641.4	1,717.4	1,678.3	1,653.0	1,627	1,644	1,632	1,631	1,634	1,638
Tobacco manufactures	60.3	59.8	59.0	58.3	59	57	56	55	55	57
Textile mill products	716.4	740.7	740.0	742.6	714	736	732	735	736	740
Apparel and other textile products	1,106.8	1,125.1	1,132.0	1,132.5	1,101	1,130	1,110	1,117	1,122	1,127
Paper and allied products	678.8	682.1	680.3	682.1	678	678	677	681	679	681
Printing and publishing	1,477.7	1,504.6	1,512.0	1,527.6	1,472	1,504	1,508	1,509	1,513	1,522
Chemicals and allied products	1,017.1	1,033.1	1,032.0	1,034.2	1,020	1,026	1,031	1,031	1,033	1,036
Petroleum and coal products	164.5	166.8	164.6	165.8	165	164	164	166	167	166
Rubber and miscellaneous plastics products	786.7	826.4	834.3	839.3	797	815	819	824	833	839
Leather and leather products	149.8	154.0	155.1	155.2	147	155	152	152	153	152
Service-producing	76,406	77,544	78,346	78,737	75,785	77,276	77,389	77,517	77,917	78,092
Transportation and public utilities	5,305	5,466	5,477	5,485	5,278	5,363	5,377	5,416	5,428	5,455
Transportation	3,099	3,231	3,245	3,248	3,071	3,133	3,147	3,183	3,194	3,216
Communication and public utilities	2,206	2,235	2,232	2,237	2,207	2,230	2,230	2,233	2,234	2,239
Wholesale trade	5,745	5,837	5,865	5,874	5,728	5,797	5,807	5,813	5,834	5,857
Durable goods	3,384	3,434	3,453	3,464	3,380	3,418	3,422	3,431	3,446	3,461
Nondurable goods	2,361	2,403	2,412	2,410	2,348	2,379	2,385	2,384	2,388	2,396
Retail trade	18,273	18,406	18,431	18,432	18,099	18,274	18,256	18,314	18,396	18,376
General merchandise stores	2,536.5	2,578.3	2,471.6	2,579.0	2,378	2,407	2,411	2,415	2,452	2,417
Food stores	2,941.9	2,961.0	2,980.5	3,008.0	2,906	2,959	2,962	2,958	2,969	2,972
Automotive dealers and service stations	1,939.3	1,998.6	2,000.7	1,999.8	1,963	1,985	1,985	1,988	1,999	2,006
Eating and drinking places	5,875.4	6,186.9	6,037.9	5,989.6	5,927	5,985	5,992	6,018	6,032	6,044
Finance, insurance, and real estate	6,397	6,445	6,430	6,435	6,418	6,408	6,424	6,429	6,444	6,459
Finance	3,204	3,289	3,286	3,292	3,212	3,291	3,293	3,292	3,296	3,302
Insurance	1,988	2,052	2,059	2,062	1,990	2,043	2,050	2,054	2,063	2,064
Real estate	1,205	1,304	1,285	1,281	1,216	1,274	1,281	1,283	1,285	1,293
Services	23,452	24,416	24,589	24,699	23,452	24,214	24,279	24,295	24,411	24,499
Business services	4,915.8	5,198.2	5,246.6	5,252.7	4,877	5,105	5,133	5,152	5,195	5,211
Health services	6,653.0	6,949.9	6,987.0	7,027.1	6,661	6,887	6,923	6,943	6,987	7,034
Government	17,234	16,776	17,413	17,592	16,900	17,070	17,046	17,048	17,204	17,244
Federal	2,879	2,941	2,960	2,965	2,900	2,936	2,940	2,962	2,961	2,966
State	4,030	3,886	4,064	4,108	3,914	3,952	3,964	3,957	3,969	3,988
Local	10,325	9,967	10,408	10,539	10,085	10,132	10,142	10,129	10,274	10,292

p = preliminary.

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Table B-2. Average weekly hours of production or nonsupervisory workers[1] on private nonagricultural payrolls by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	Nov. 1986	Sept. 1987	Oct. 1987 p	Nov. 1987 p	Nov. 1986	July 1987	Aug. 1987	Sept. 1987	Oct. 1987 p	Nov. 1987 p
Total private	34.7	34.7	34.9	34.8	34.8	34.8	34.9	34.6	34.9	34.9
Mining	41.4	42.1	42.7	42.3	(2)	(2)	(2)	(2)	(2)	(2)
Construction	36.5	36.4	38.8	37.0	(2)	(2)	(2)	(2)	(2)	(2)
Manufacturing	41.0	40.8	41.3	41.4	40.8	41.0	41.0	40.6	41.3	41.2
Overtime hours	3.6	3.9	4.1	4.1	3.5	3.8	3.8	3.6	4.0	3.9
Durable goods	41.6	41.1	41.8	41.9	41.4	41.6	41.6	41.0	41.9	41.8
Overtime hours	3.7	3.9	4.2	4.2	3.5	3.8	4.0	3.7	4.1	4.0
Lumber and wood products	40.4	39.9	40.6	40.1	40.8	40.6	40.4	39.4	40.4	40.5
Furniture and fixtures	40.2	39.8	40.7	40.2	39.8	40.0	40.1	39.3	40.1	39.6
Stone, clay, and glass products	41.8	42.5	42.9	42.3	41.9	42.2	42.1	41.9	42.5	42.4
Primary metal industries	42.4	43.4	43.5	43.9	42.4	43.4	43.5	43.4	43.8	43.8
Blast furnaces and basic steel products	42.4	45.1	43.7	44.0	42.5	44.1	44.0	45.2	44.3	44.1
Fabricated metal products	41.6	40.9	42.0	42.2	41.4	41.4	41.5	40.8	42.0	42.0
Machinery, except electrical	41.9	41.6	42.4	42.9	41.7	42.4	42.2	41.6	42.6	42.7
Electrical and electronic equipment	41.4	40.5	41.0	41.4	41.0	41.1	41.0	40.4	41.0	41.0
Transportation equipment	42.4	41.2	42.3	42.5	42.2	41.7	41.9	41.3	42.5	42.3
Motor vehicles and equipment	42.5	41.1	42.6	43.0	42.4	41.9	41.9	41.3	42.9	43.1
Instruments and related products	41.4	41.1	41.6	41.8	41.1	41.6	41.7	41.1	41.9	41.5
Miscellaneous manufacturing	40.1	39.0	40.0	39.3	(2)	(2)	(2)	(2)	(2)	(2)
Nondurable goods	40.3	40.4	40.6	40.6	40.0	40.3	40.3	40.1	40.5	40.4
Overtime hours	3.6	4.0	3.9	3.9	3.5	3.7	3.7	3.6	3.8	3.8
Food and kindred products	40.2	40.8	40.7	40.5	40.0	39.9	40.3	40.2	40.5	40.3
Tobacco manufactures	38.0	38.9	40.8	41.1	(2)	(2)	(2)	(2)	(2)	(2)
Textile mill products	41.8	41.7	42.2	42.3	41.6	42.4	42.1	41.3	41.9	41.9
Apparel and other textile products	37.2	36.3	37.6	37.5	36.9	37.3	37.4	36.3	37.5	37.2
Paper and allied products	43.4	44.1	43.6	43.8	43.2	43.5	43.4	43.8	43.6	43.6
Printing and publishing	38.3	38.5	38.2	38.3	38.0	38.1	37.9	38.2	38.1	38.0
Chemicals and allied products	42.4	42.8	42.4	42.8	42.3	42.2	42.4	42.8	42.7	42.7
Petroleum and coal products	44.0	43.8	43.7	43.0	43.6	44.4	43.3	43.2	43.4	42.8
Rubber and miscellaneous plastics products	41.7	41.4	42.0	42.2	(2)	(2)	(2)	(2)	(2)	(2)
Leather and leather products	37.1	37.7	38.7	38.7	(2)	(2)	(2)	(2)	(2)	(2)
Transportation and public utilities	39.3	39.2	39.3	39.3	39.2	39.2	39.3	39.1	39.3	39.2
Wholesale trade	38.4	38.1	38.4	38.3	38.3	38.1	38.3	38.0	38.4	38.3
Retail trade	29.0	29.6	29.2	29.1	29.2	29.3	29.6	29.6	29.3	29.3
Finance, insurance, and real estate	36.5	36.0	36.2	36.3	(2)	(2)	(2)	(2)	(2)	(2)
Services	32.4	32.4	32.5	32.6	32.5	32.5	32.5	32.5	32.5	32.7

[1] Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately four-fifths of the total employees on private nonagricultural payrolls.

[2] This series is not published seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

p = preliminary.

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Table B-3. Average hourly and weekly earnings of production or nonsupervisory workers[1] on private nonagricultural payrolls by industry

Industry	Average hourly earnings				Average weekly earnings			
	Nov. 1986	Sept. 1987	Oct. 1987 p	Nov. 1987 p	Nov. 1986	Sept. 1987	Oct. 1987 p	Nov. 1987 p
Total private	$8.80	$8.86	$8.89	$8.96	$308.14	$316.58	$317.14	$318.07
Seasonally adjusted	8.86	9.02	9.07	9.12	308.33	312.09	314.14	318.29
Mining	12.57	12.63	12.56	12.68	520.40	525.30	527.77	527.90
Construction	13.86	12.77	12.79	12.79	482.09	484.83	496.25	473.23
Manufacturing	9.78	10.00	9.95	10.01	400.98	408.00	410.94	414.41
Durable goods	10.33	10.53	10.51	10.57	429.73	432.78	430.32	442.88
Lumber and wood products	8.35	8.48	8.42	8.42	337.34	338.35	341.05	337.64
Furniture and fixtures	7.53	7.73	7.72	7.74	303.51	308.45	314.20	311.15
Stone, clay, and glass products	10.14	10.40	10.33	10.35	423.95	442.00	443.16	437.81
Primary metal industries	11.90	12.26	12.05	12.08	500.32	521.22	526.16	530.91
Blast furnaces and basic steel products	13.69	14.17	13.97	13.95	586.03	638.07	610.69	617.88
Fabricated metal products	9.96	10.06	10.10	10.16	413.50	410.64	424.20	428.73
Machinery, except electrical	10.62	10.81	10.85	10.91	466.98	469.70	480.04	488.06
Electrical and electronic equipment	9.72	9.98	9.94	9.98	402.42	406.19	407.34	413.17
Transportation equipment	12.98	13.67	13.10	13.19	546.11	558.64	556.13	560.15
Motor vehicles and equipment	13.44	13.60	13.75	13.83	568.51	562.64	585.75	594.69
Instruments and related products	9.63	9.88	9.81	9.88	398.68	402.78	408.10	412.98
Miscellaneous manufacturing	7.62	7.76	7.75	7.76	303.36	302.64	310.00	304.97
Nondurable goods	9.02	9.28	9.18	9.24	363.51	374.91	372.71	375.16
Food and kindred products	8.79	8.92	8.86	8.94	353.36	365.94	360.60	362.87
Tobacco manufactures	12.67	12.80	12.75	13.54	401.46	401.62	526.20	556.69
Textile mill products	7.05	7.23	7.26	7.32	294.69	301.49	305.53	309.64
Apparel and other textile products	5.87	6.01	5.98	6.00	218.36	218.16	224.05	225.00
Paper and allied products	11.27	11.67	11.45	11.44	489.12	514.65	499.22	501.07
Printing and publishing	10.11	10.48	10.43	10.44	387.21	403.48	398.43	399.83
Chemicals and allied products	12.17	12.36	12.33	12.38	516.01	537.57	531.27	538.62
Petroleum and coal products	14.32	14.71	14.64	14.75	630.08	644.30	639.77	634.25
Rubber and miscellaneous plastics products	8.77	8.98	8.91	8.99	365.71	371.77	376.22	379.38
Leather and leather products	5.98	6.09	6.08	6.11	221.86	229.59	235.30	230.46
Transportation and public utilities	11.90	12.03	12.01	12.12	467.67	471.58	471.99	470.32
Wholesale trade	9.67	9.67	9.67	9.75	363.43	368.43	371.33	373.43
Retail trade	6.08	6.20	6.15	6.18	176.32	183.52	179.58	179.84
Finance, insurance, and real estate	8.57	8.79	8.80	8.86	312.81	316.44	318.56	324.32
Services	8.33	8.55	8.61	8.71	269.89	277.02	279.03	283.55

[1] See footnote 1, table B-2.
p = preliminary.

NOTE: Preliminary earnings data for fabricated metal products for September and October, as published in the table of the October release, were erroneous (as were totals incorporating those data).

Table B-4. Hourly Earnings Index for production or nonsupervisory workers[1] on private nonagricultural payrolls by industry

(1977 = 100)

Industry	Not seasonally adjusted					Seasonally adjusted						
	Nov. 1986	Sept. 1987	Oct. 1987p	Nov. 1987p	Percent change from: Nov. 1986-Nov. 1987	Nov. 1986	July 1987	Aug. 1987	Sept. 1987	Oct. 1987p	Nov. 1987p	Percent change from: Oct. 1987-Nov. 1987
Total private nonfarm:												
Current dollars	171.3	175.0	176.8	175.9	2.6	171.1	173.2	174.1	176.0	176.8	175.7	0.5
Constant (1977) dollars	95.6	93.7	93.3	N.A.	(2)	95.5	93.7	93.7	93.8	93.6	N.A.	(3)
Mining	182.6	183.0	182.5	184.1	.9	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Construction	154.2	155.9	156.2	156.0	1.1	154.7	154.3	154.7	156.0	156.7	156.4	1.1
Manufacturing	173.0	176.3	175.7	176.5	2.0	173.2	176.7	175.5	176.7	176.3	176.6	.2
Transportation and public utilities	174.1	176.6	176.3	177.7	2.1	173.9	176.6	176.0	175.7	176.3	176.5	.3
Wholesale trade	174.8	176.5	176.3	179.8	2.9	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Retail trade	159.3	161.7	161.7	162.2	1.9	159.3	160.9	161.5	162.7	162.6	162.2	.1
Finance, insurance, and real estate	186.0	188.9	189.3	192.0	4.3	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Services	177.6	183.0	183.6	185.8	4.6	177.1	180.9	182.6	182.5	183.9	185.2	.7

1 See footnote 1, table B-2.
2 Change is -1.0 percent from October 1986 to October 1987, the latest month available.
3 Change is -.3 percent from September 1987 to October 1987, the latest month available.
4 These series are not seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.
N.A. Data not available.
p = preliminary.

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Table B-5. Indexes of aggregate weekly hours of production or nonsupervisory workers[1] on private nonagricultural payrolls by industry

(1977 = 100)

Industry	Not seasonally adjusted				Seasonally adjusted					
	Nov. 1986	Sept. 1987	Oct. 1987 p	Nov. 1987 p	Nov. 1986	July 1987	Aug. 1987	Sept. 1987	Oct. 1987 p	Nov. 1987 p
Total	118.9	121.9	122.9	122.7	118.2	120.6	121.2	120.4	121.9	122.2
Goods-producing	98.7	101.1	103.5	102.2	97.8	99.5	99.7	97.7	101.2	101.3
Mining	80.4	86.0	88.4	87.5	79.5	85.0	85.2	84.9	87.9	86.1
Construction	132.5	138.0	147.3	137.0	131.1	135.2	133.6	126.9	136.4	135.8
Manufacturing	93.1	94.7	95.8	96.2	92.3	93.6	93.8	93.1	95.0	95.3
Durable goods	90.5	91.1	92.9	93.6	89.8	90.6	91.2	90.1	92.5	92.8
Lumber and wood products	99.8	103.7	104.3	101.5	100.9	102.4	101.2	99.2	101.9	102.6
Furniture and fixtures	108.8	111.7	115.6	115.0	106.3	111.6	111.7	109.7	113.0	112.7
Stone, clay, and glass products	86.0	89.5	90.1	88.5	85.5	86.1	86.1	85.9	87.5	87.7
Primary metal industries	80.5	85.9	86.0	87.1	80.9	84.6	85.0	85.9	87.0	87.6
Blast furnaces and basic steel products	46.2	55.1	53.4	54.3	47.1	52.6	53.0	55.2	55.1	55.1
Fabricated metal products	89.5	89.4	92.0	93.1	88.5	89.0	89.4	88.2	91.3	92.1
Machinery, except electrical	84.3	86.5	88.6	90.4	84.1	87.0	87.4	86.7	89.3	90.1
Electrical and electronic equipment	102.4	100.0	102.2	103.7	101.1	100.6	100.8	99.3	101.7	102.2
Transportation equipment	99.1	95.5	97.5	98.2	97.9	94.3	97.4	95.2	97.8	97.0
Motor vehicles and equipment	87.8	83.7	86.4	87.4	87.0	81.5	86.1	83.3	86.7	86.7
Instruments and related products	103.1	101.9	103.6	105.2	102.1	103.0	103.0	102.1	104.6	104.4
Miscellaneous manufacturing	83.4	83.1	86.4	85.6	80.2	81.9	82.3	80.7	82.7	81.9
Nondurable goods	96.9	99.9	100.0	100.1	95.8	98.1	97.7	97.4	98.7	98.9
Food and kindred products	100.4	107.9	106.4	102.1	98.7	99.6	99.5	99.1	100.3	100.3
Tobacco manufactures	82.4	81.5	84.2	82.4	76.7	73.1	71.0	72.4	73.0	77.5
Textile mill products	81.3	86.0	84.9	85.4	80.1	84.8	83.7	82.4	83.7	84.2
Apparel and other textile products	86.4	85.4	89.1	88.8	85.2	88.2	86.6	86.8	87.9	87.6
Paper and allied products	100.6	102.9	101.3	102.5	100.1	100.8	100.4	101.9	101.3	101.9
Printing and publishing	130.7	133.1	132.4	133.9	129.1	131.4	131.4	132.6	132.5	132.5
Chemicals and allied products	93.4	96.7	95.5	96.8	93.4	94.5	95.5	96.4	96.5	96.8
Petroleum and coal products	82.4	86.0	85.1	83.1	82.6	84.7	83.4	83.5	83.5	82.4
Rubber and miscellaneous plastics products	113.2	116.0	119.0	120.5	112.4	115.0	115.5	115.5	118.7	119.8
Leather and leather products	56.7	60.5	62.3	62.3	55.5	62.2	61.4	60.0	61.6	60.8
Service-producing	129.9	133.5	133.6	134.1	129.6	132.3	133.1	132.9	133.3	133.8
Transportation and public utilities	108.0	111.1	111.8	112.0	107.0	109.0	109.7	109.9	110.8	111.0
Wholesale trade	117.3	118.3	119.5	119.5	116.8	117.5	118.2	117.3	118.8	119.0
Retail trade	120.3	123.0	121.7	122.6	119.2	121.2	122.4	122.5	121.8	121.4
Finance, insurance, and real estate	139.6	141.9	141.8	142.4	140.3	142.0	143.0	141.4	142.2	143.1
Services	147.7	153.2	154.3	154.6	147.9	152.5	152.9	152.9	153.5	153.8

[1] See footnote 1, table B-2.

p = preliminary.

Table B-6. Indexes of diffusion: Percent of industries in which employment[1] increased

Time span	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span	1985	55.9	47.0	52.4	47.3	53.2	46.8	53.8	53.8	47.8	53.2	54.3	57.3
	1986	53.2	48.1	48.1	53.5	52.6	46.8	52.4	56.2	55.1	53.2	59.7	59.7
	1987	53.5	56.8	58.6	58.4	58.6	55.7	68.6	54.6	65.4	p66.8	p69.2	
Over 3-month span	1985	51.1	48.4	42.4	46.5	44.3	49.7	47.0	48.6	45.9	47.6	55.1	56.5
	1986	49.7	44.9	45.7	48.4	47.6	45.4	48.4	55.1	55.9	58.1	58.6	60.3
	1987	58.6	59.5	61.1	61.6	61.4	67.1	66.2	75.1	p69.5	p76.5		
Over 6-month span	1985	46.5	46.5	43.2	44.3	44.3	45.1	43.0	44.3	49.2	49.2	47.3	45.9
	1986	47.6	47.6	43.0	45.2	45.4	48.6	47.3	51.0	50.2	58.9	57.8	58.9
	1987	61.9	62.7	58.9	67.3	67.6	71.1	p75.1	p78.9				
Over 12-month span	1985	44.6	44.1	43.8	40.8	41.6	41.6	42.2	42.6	43.8	44.3	44.1	42.4
	1986	43.2	44.1	46.2	45.7	47.8	49.1	49.5	51.6	54.9	52.2	55.1	56.5
	1987	62.2	63.5	67.3	p69.2	p71.9							

[1] Number of employees, seasonally adjusted for 1, 3, and 6 month spans, on payrolls of 185 private nonagricultural industries. Data for the 12-month span are unadjusted.

p = preliminary.

NOTE: Figures are the percent of industries with employment rising. (Half of the unchanged components are counted as rising.) Data are centered within the spans.

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Senator SARBANES. Well, thank you very much, Commissioner.

The first thing I want to do is to turn to the chart that you provided us today on the comparison of unemployment measures, job losers and insured unemployed. It's the one that is in color.

Mrs. NORWOOD. Yes, I have it.

Senator SARBANES. Now the first comment I want to make is I think it's the first chart we've received from the BLS in color [laughter] and, if so, I want to commend and compliment you for it because ordinarily you have to puzzle out which line is solid and which one is dotted and which one is double dotted, so to speak.

So this is a great advance and it makes it easier to read the chart. So we thank you for it, and we want to acknowledge and recognize this significant advance at the Bureau this morning. [Laughter.]

Mrs. NORWOOD. Thank you very much, Mr. Chairman. We'll try to see to it that you get charts in color in the future.

Senator SARBANES. The thing that strikes me is the gap that has developed between the red line, job losers, and the blue, insured unemployed, over the years.

As we moved through the 1970's, they coincided or were very close, and I take it what this growing gap since then reflects is that more and more people who lost their jobs are not receiving unemployment benefits. Is that correct?

Mrs. NORWOOD. That's right.

Senator SARBANES. What is the explanation for that, the contraction in the coverage of the unemployment insurance program? Of course, the green line has dropped completely off the chart because there is no longer the extended insured program.

Mrs. NORWOOD. The changes here in these relationships are really somewhat puzzling. It's quite clear if you look at that chart that during recessions there is somewhat of a shift related to the recession as people lose jobs, and then in a recovery period, such as in the 1970's, you can see that the lines move very close together.

What seems to be very different is the period of this current expansion, and I suppose there were greater differences also during the 1981 and 1982 period as well. That you can see from the chart. Now why is that the case?

There are several reasons that have been advanced, and I'm not sure that we can really pinpoint the exact ones. But clearly there have been changes in the legislation making it somewhat more restrictive in application.

There have been changes in the State administration of laws, and each of those laws is somewhat different, but many of the States have tightened up on their eligibility requirements, particularly in the administration of the providing of the benefits. So there have been changes I think in the tightening of the law.

In addition, we have had very large increases in the labor force. So we have a lot of people coming into the labor force who have not worked long enough to earn eligibility. You have to work for a while to get eligibility. So there are more people who don't have that eligibility.

Then, we had from 1980 through 1982 back-to-back recessions. Some people who lost their jobs in 1980, for example, may have

gone back for a little while but didn't work long enough to gain coverage or remain covered.

So there are many reasons for it, but it's quite clear to me that the relationships have shifted completely.

Senator SARBANES. Well, now I remember in a previous hearing we pursued the point of what constitutes being employed for the purposes of your survey, and my recollection was—well let me simply ask the question. What does constitute being employed for the purpose of your surveys?

Mrs. NORWOOD. To be employed for purposes of our survey, apart from unpaid family members, you just have to have worked during the survey week.

Senator SARBANES. Worked how much?

Mrs. NORWOOD. There is no limitation on the number of hours.

Senator SARBANES. So if you worked a couple of hours you're considered employed.

Mrs. NORWOOD. Yes, you're counted as employed; that's right.

Senator SARBANES. That was my recollection.

Now if you were surveyed later and not working, you would be a job loser, but you would not have qualified for unemployment insurance because at the time you were working you weren't working sufficient hours. Would that be correct?

Mrs. NORWOOD. That might be. It depends on the past history of the worker.

Senator SARBANES. Do we have any comparisons of whether the internal composition of a 6-percent unemployment rate today is comparable to that composition 10 or 15 years ago?

The point I'm trying to get at is that 10 or 15 years ago if you had a 6-percent unemployment rate, and you then look at the 94 percent that are employed and therefore not contributing to the rate, that a larger portion of them would be holding full-time jobs, whereas today you have more of the people that are in the employed category and therefore not counted as unemployed are in part-time jobs and are not working a full 40-hour week. So that while you have the same unemployment rate today, it does not reflect the same employment reality in the economy.

Mrs. NORWOOD. Well, I think that's true. We now have 14.5 million people in this country who are working part time on a voluntary basis; that is, that's what they want to do, but we still have 5.6 million people who are working part time but are looking for full-time jobs. You did not have such large numbers in the 1960's and the 1970's.

Senator SARBANES. By large numbers, you mean percentagewise?

Mrs. NORWOOD. Yes, I believe that's true. We could check that out. It is more.

Senator SARBANES. If you could give us a memo on that, that would be very helpful. We obviously look at these overall figures, but at some point we have to probe behind them to see what kind of employment reality they are reflecting.

Mrs. NORWOOD. I would be glad to.

[The following information was subsequently supplied for the record:]

U. S. Department of Labor

Commissioner for
Bureau of Labor Statistics
Washington, D.C. 20212

JAN 14 1988

Honorable Paul Sarbanes
United States Senate
Washington, D.C. 20510

Dear Senator Sarbanes:

This is a follow-up to my appearance at the Joint Economic Committee hearing on December 4, where I promised to provide some additional information on the recent trends in the incidence of involuntary part-time work and the inflation/unemployment relationship at the subnational level.

The number of workers on involuntary part time -- those whose hours have been cut back and those who, although preferring full-time work, had to settle for a part-time job -- has remained relatively high for more than two years. After declining from a post-recessionary peak of 6.8 million reached in January 1983, the number of such workers has fluctuated around 5.5 million since the middle of 1985. Of course, with total employment having risen rapidly during this period, the proportion of workers on involuntary part time -- also referred to as part time for economic reasons -- has still been declining. However, the decline in this measure has not been nearly as sharp as the decline in the jobless rate.

Our examination of the data on this topic shows that young people, women, and blacks are disproportionately represented

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among the workers on involuntary part time. This is clearly indicated by the following tabulation, which is based on data for 1986.

	Group's percentage of:	
	Persons at work	Involuntary part-time workers
Persons 16 to 24 years of age	18.8	32.7
Persons 25 years and over	81.2	67.3
Men	55.2	44.9
Women	44.8	55.1
White	87.1	80.8
Black	10.0	16.3

The industries with the largest share of their workers on part time for economic reasons in 1986 were retail trade (9.5 percent), construction (6.9 percent), and the services industries (5.2 percent). Together, these three industries accounted for about 74 percent of the nonagricultural workers on involuntary part time.

As with most labor market phenomena, there is no simple explanation for the stubbornly high level of involuntary part-time employment. One probable factor is the relatively greater employment growth in retail trade and certain service industries which hire only part-time workers for some jobs. However, it should also be noted that nearly one-third of the persons on part time for economic reasons work 30 hours or more, which is nearly full time.

As for the relationship between inflation and unemployment across regions of the country, we have enclosed a table that shows unemployment and inflation data for each of the four major geographic regions of the country for the 1981-87 period. The data are the annual average civilian unemployment rates and the percent changes in the Consumer Price Index for All Urban Consumers over the twelve-month period ending with December of each year (November in the case of 1987). While the 1987 data show that the region with the lowest unemployment rate (the Northeast) also has the highest inflation rate, the converse is not true. The region with the lowest inflation rate (the West) does not

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have the highest unemployment rate; in fact, it has the third highest unemployment rate. Charts that plot the regional inflation and unemployment rates for each year are also enclosed. There appears to be no historically consistent correlation between these indicators.

I hope this information has been helpful to you. If you have any further questions please let me know.

Sincerely yours,

Janet

JANET L. NORWOOD
Commissioner

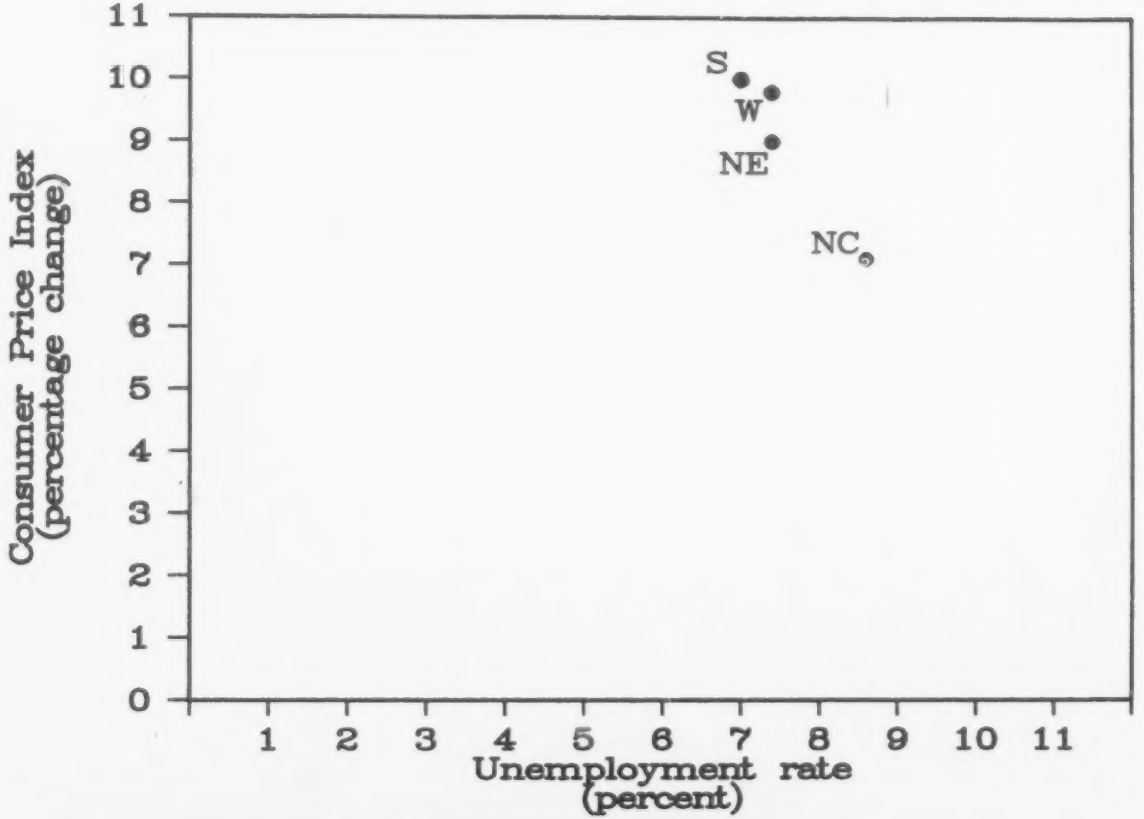
Enclosures

Annual Average Civilian Unemployment Rates and Percent Changes in All Items Consumer Price Index for All Urban Consumers (CPI-U) for the 12 Months Ending in December, by Region, 1981-1987

Year and Indicator	Region			
	Northeast	North Central	South	West
1981				
Unemployment rate	7.4	8.6	7.0	7.4
CPI-U	9.0	7.1	10.0	9.8
1982				
Unemployment rate	9.0	11.1	8.9	9.9
CPI-U	4.0	6.3	3.7	1.3
1983				
Unemployment rate	8.7	10.8	9.3	9.5
CPI-U	4.0	3.4	3.6	4.2
1984				
Unemployment rate	6.8	8.4	7.2	7.6
CPI-U	4.2	3.2	4.0	4.5
1985				
Unemployment rate	6.2	8.0	7.2	7.3
CPI-U	4.4	3.3	3.2	4.1
1986				
Unemployment rate	5.6	7.3	7.6	7.1
CPI-U	1.7	.6	.9	1.4
1987*				
Unemployment rate	4.5	6.7	6.9	6.4
CPI-U	5.3	4.5	4.2	4.2

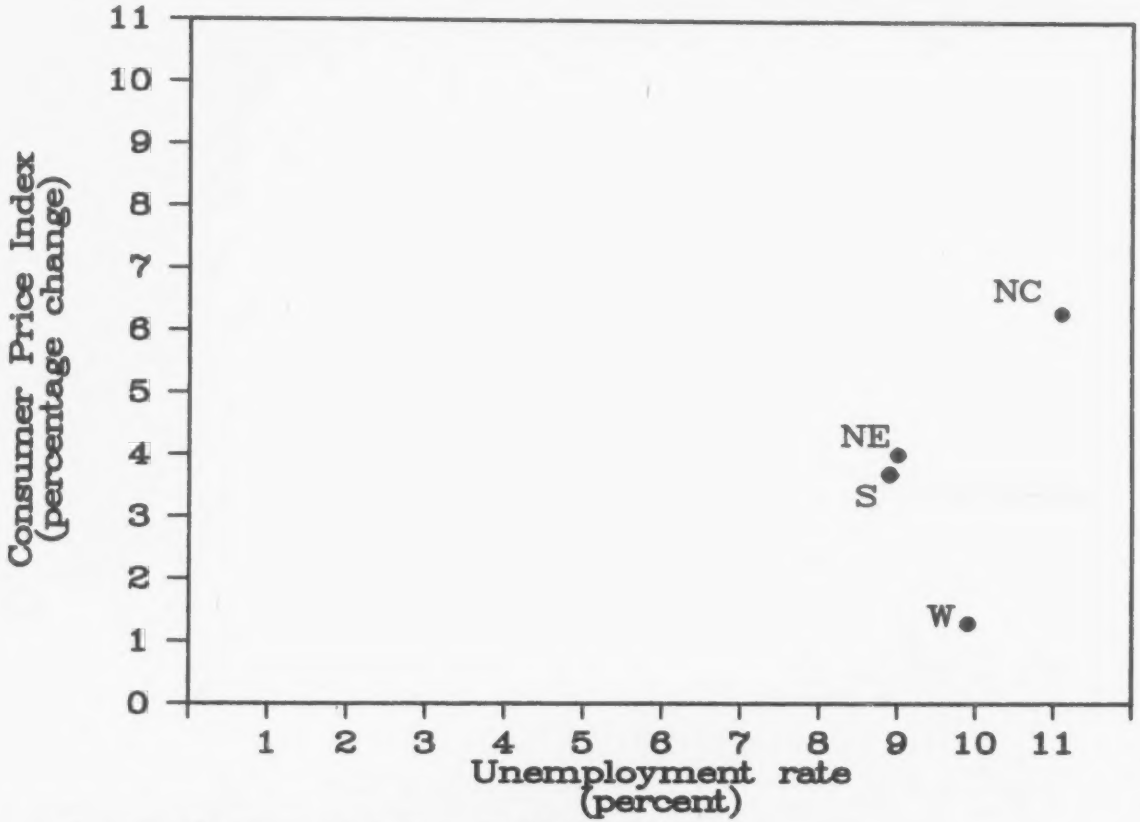
*12 Months ending November 1987
Source: Bureau of Labor Statistics
December 1987

Consumer Price Index and the Unemployment Rate, by Region, 1981



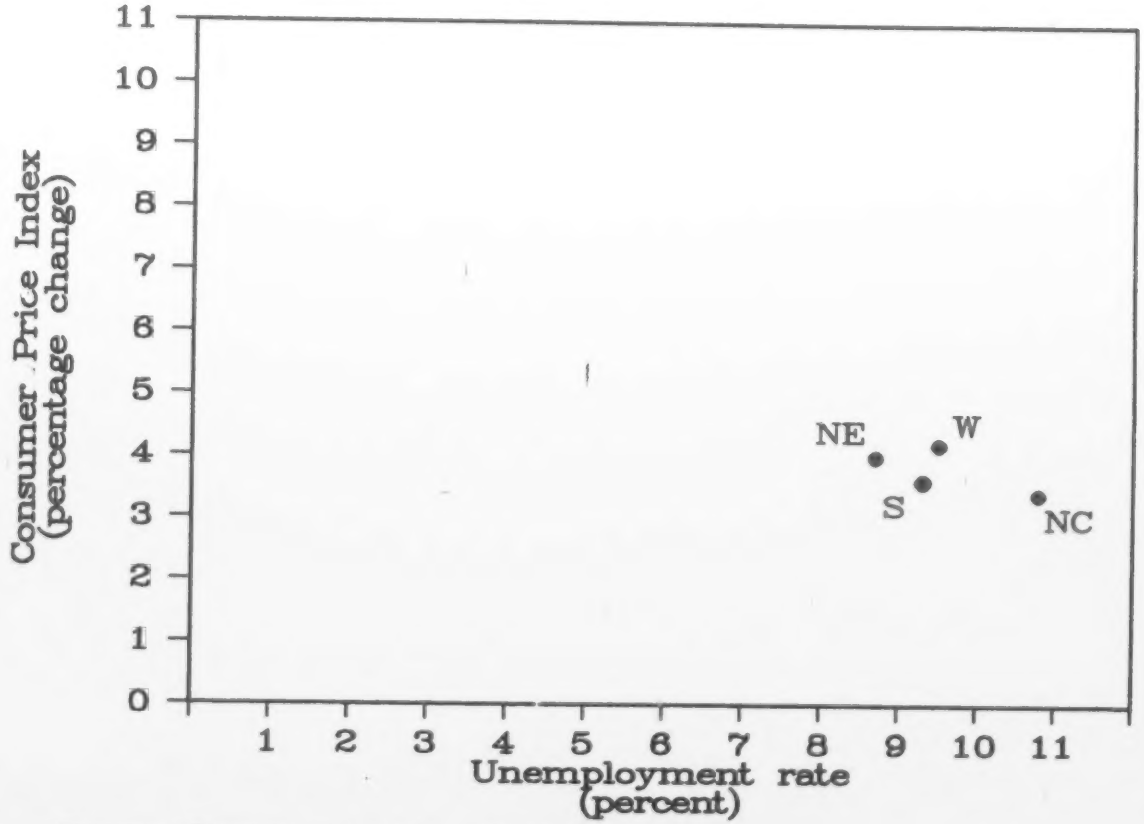
Source: Bureau of Labor Statistics, OPLC

Consumer Price Index and the Unemployment Rate, by Region, 1982



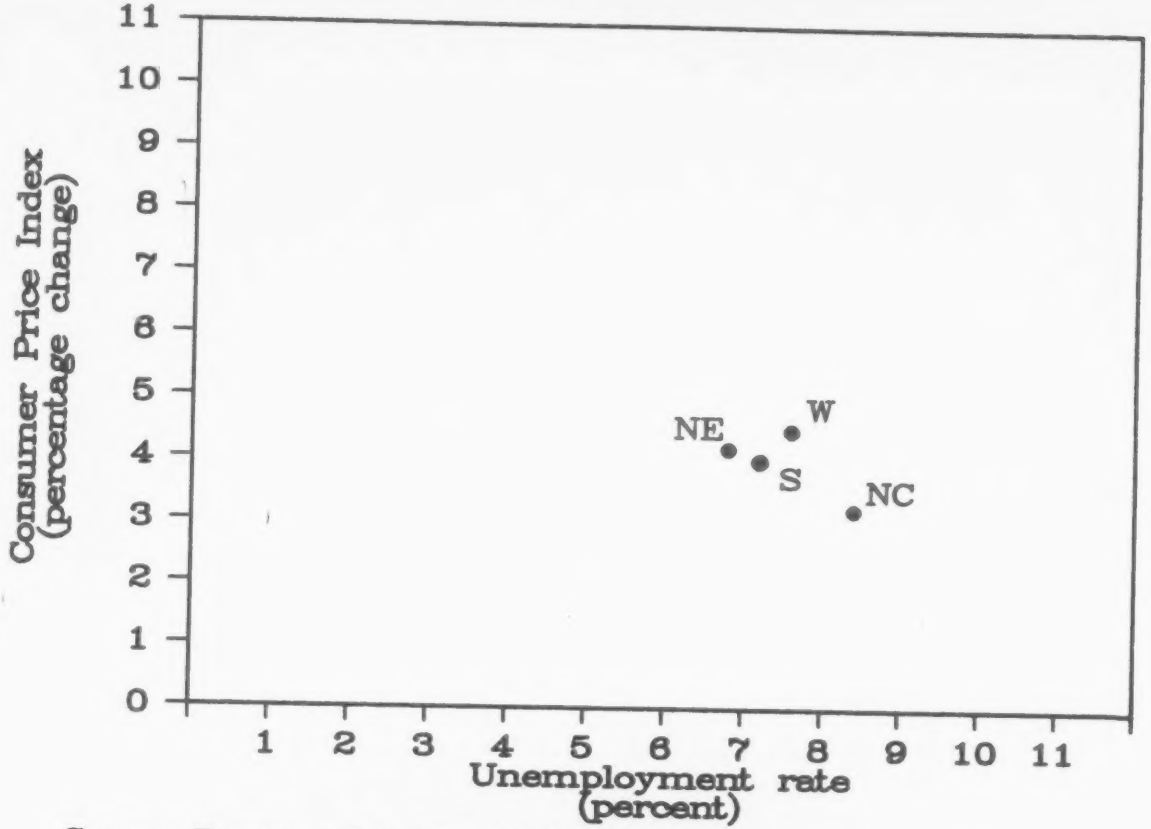
Source: Bureau of Labor Statistics, OPLC

Consumer Price Index and the Unemployment Rate, by Region, 1983



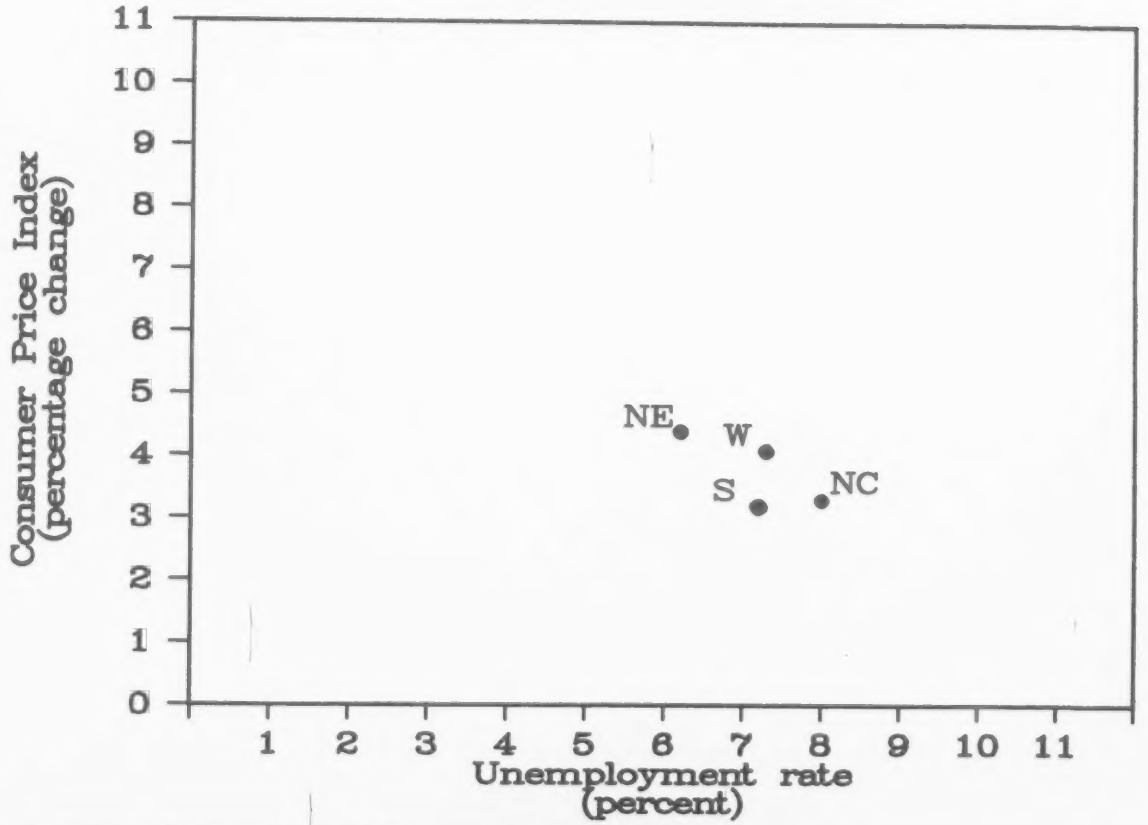
Source: Bureau of Labor Statistics, OPLC

Consumer Price Index and the Unemployment Rate, by Region, 1984



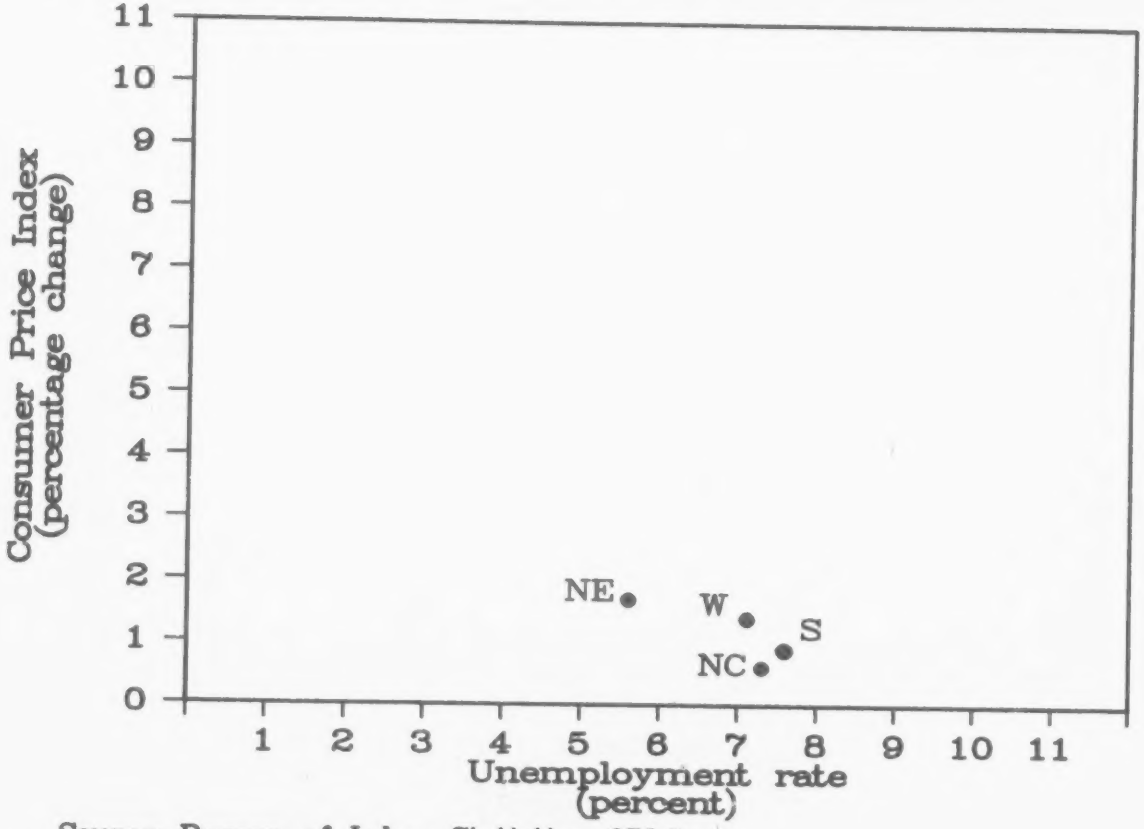
Source: Bureau of Labor Statistics, OPLC

Consumer Price Index and the Unemployment Rate, by Region, 1985



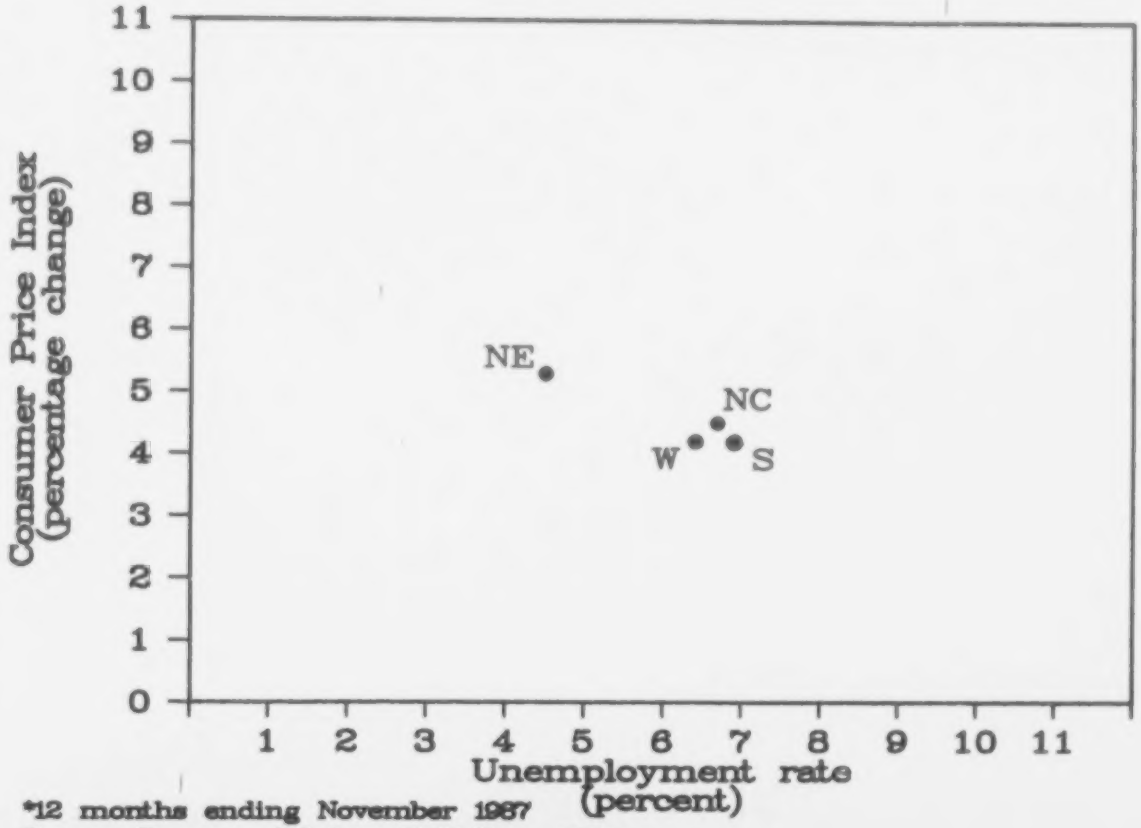
Source: Bureau of Labor Statistics, OPLC

Consumer Price Index and the Unemployment Rate, by Region, 1986



Source: Bureau of Labor Statistics, OPLC

Consumer Price Index and the Unemployment Rate, by Region, 1987*



*12 months ending November 1987
Source: Bureau of Labor Statistics, OPLC

Senator SARBANES. In the tables you've given us this morning, there seems to be a shift in the economic growth regionally in the country, and in fact the fastest growing regions, which previously were New England, the East Coast and the West Coast, now have been displaced by the East South Central and West South Central regions, if I read the tables correctly. Is that right? Would that be correct?

Mrs. NORWOOD. I believe you have some charts attached to that.

Senator SARBANES. Yes.

Mrs. NORWOOD. If you look at those charts, I think the interesting thing there is especially the North Central region, which we know has had difficulties for a long time.

Senator SARBANES. By a chart, do you mean this table?

Mrs. NORWOOD. Behind that isn't there a chart?

Senator SARBANES. Yes.

Mrs. NORWOOD. There is one on employment and one on unemployment. If you look at the employment, you'll see that the West North Central hasn't done very well. It also has not done very well in terms of the drop in unemployment, and that's, of course, the part of the country that involves the Dakotas, Kansas, Minnesota, Nebraska, Missouri, and Iowa.

So we are now seeing some changes in the middle part of the country that weren't showing up as much in the data before. I think there is quite a difference here from what I've seen in the past. That is one of the things that is interesting.

Senator SARBANES. Well, the East North Central has not done that well either, has it, in employment?

Mrs. NORWOOD. No.

Senator SARBANES. And yet in your statement you make the point about an improvement in manufacturing jobs, where you say, "Manufacturing showed continued job strength." And yet the region that we have traditionally regarded as a prime manufacturing area is not reflecting that.

What do we draw from that, that manufacturing is shifting in terms of where it is located?

Mrs. NORWOOD. There is some shifting I think that is going on.

Mr. PLEWES. A year ago that region on these charts would be down. Now we are just seeing very slow employment growth and very little decline in unemployment, but that has turned around with the improved prospects for manufacturing now in that region. So it doesn't look as strong as other regions, and that's true, but a year ago it was in a downward direction, sir.

Senator SARBANES. If a softening trend is at work in the economy, how long does it take before it reflects itself in the unemployment figures? Do you have any historical basis for giving us an answer to that question?

Mrs. NORWOOD. No, I don't. It depends in large part on where it takes place. Retail trade is one of the places that people are looking for problems. Retail trade has been somewhat weak in employment, but there is no real evidence of a large change yet.

I think as we move into the Christmas season in the next couple of months we'll see what happens. One of the issues that makes the data difficult to read is that in retail trade when there is sluggish-

ness, there still may be a lot of sales started. So it's hard to extract exactly what is going on.

Since we have heard so much about the situation in stock brokerage firms, we were interested in looking to see whether there was any evidence of employment declines there. There is none. In fact, there was perhaps even a slight increase in employment there. That is not unusual though.

It often takes a long time to separate someone from a payroll, particularly white collar workers, who are generally given somewhat more notice. So I would not expect to see, in 1 month following the stock market decline, big employment declines showing up in the financial securities industry. I think that if it does occur, it wouldn't be probably until January or February.

In addition, there is some evidence that at least in the short run there may have been more work to do as a result of the stock market crash in those areas.

You go on then to look at the consumer confidence surveys. Michigan attempted to divide its sample, doing part of the sample of asking consumers how they felt about what their plans were going to be for spending before and after the stock market decline. Their samples were very small and there seemed to be some indication that consumers would be more cautious, but there is nothing there really that you could expect to see translated into employment figures very quickly, if at all.

Auto sales are not doing terribly well at the moment, but they go up and down, depending upon the incentive plans that are applied. There were big incentives given in the summer months and they have been withdrawn now. So it's really that which is affecting the sales.

Housing starts and housing permits are down, but there, too, that's, of course, tied up with interest rates to a large extent. Whether people are being more careful, the general wisdom seems to be that people are not going to buy big ticket items: cars, refrigerators, appliances, and houses. There is not a lot of evidence of that yet, but it may be too soon to tell.

Senator SARBANES. Thank you.

Senator Melcher.

Senator MELCHER. Sometimes I find myself not understanding terms I use. When I use this term "employment in services" I know I'm talking about health and barber shops and beauty shops and tailors and bookkeepers and accountants. What else am I talking about?

Mrs. NORWOOD. Well, you're talking about education, teachers, government is generally included, State and local governments and the Federal Government.

Senator MELCHER. In general I'm talking about all professionals, am I not?

Mrs. NORWOOD. Not necessarily because we're talking about retail trade. So you have a lot of sales clerks. You're talking about eating and drinking places, restaurants which have lots of people who are not really executives.

Senator MELCHER. Well, I mean all professionals are included in it.

Mrs. NORWOOD. The services industries, the service producing sector has a large proportion of our professional employees, but there are, of course, some professional employees in the goods producing industries as well.

Senator MELCHER. Am I talking about physicists that are working for the Government on a contract?

Mrs. NORWOOD. Yes, the temporary help industry or contracting help industry would be in services.

Senator MELCHER. Am I talking about people who make computers or not?

Mrs. NORWOOD. Those who make them, those who work for computer manufacturing firms, even if they are in the design portion, would be counted in manufacturing.

Senator MELCHER. What should I expect to be the result in employment as a result of Federal budget cuts and where should I look for them to be? Everywhere?

Mrs. NORWOOD. The initial effect, of course, would be everywhere that government is operating directly, people who work for the Government in whatever part of the country.

The next effect would be the lack of government money that has gone into a lot of areas, and then gradually it would spread into other kinds of things.

Senator MELCHER. The people that work for the U.S. Government, we're not making automatic cuts in personnel. The military makes up about, what, 40 percent of the people that get government pay checks. We are not going to cut the numbers in the military.

So when they make these cuts, where do you expect them to show up in these figures?

Mrs. NORWOOD. I have no idea what the Congress is going to decide. All I know is what I read in the newspapers. But it's quite clear that there will be somewhat less purchasing power, but exactly where it is depends upon what the decisions are.

Senator MELCHER. What will be the impact? Can you project anything?

Mrs. NORWOOD. No, I don't know.

Senator MELCHER. We happen to be experiencing in our State—and maybe we're different, I don't know—an increasing number of young people who are sort of floating between hither and yon. They get a job for 6 weeks or 7 weeks and then come home and never apply for unemployment insurance because they leave the State where they last held a job. Is that a significant occurrence, because they are not going to show up as unemployed, are they?

Mrs. NORWOOD. Not unless they are looking for a job. If they are not working and looking for a job, then they would show up as unemployed.

Senator MELCHER. Just by dropping down to the State employment bureau at home after returning, let's say, from Arizona, are they going to show up in your figures?

Mrs. NORWOOD. Probably. I mean it depends on how they respond to the questionnaire. The questions are carefully designed to see to it that we find out first whether people have worked at all during the survey week, and then whether the preceding 4 weeks they have taken some steps to look for a job.

Senator MELCHER. My question is very simple. They have come home from Arizona. Two weeks later or 10 days later they drop down to the State unemployment office and say have you got anything. Are they counted?

Mrs. NORWOOD. If they tell us in the survey that they have gone to the employment office to look for work, yes.

Senator MELCHER. In the survey by far the largest region is what you lump into the South. Is there some table there that you can look at? The District of Columbia and Maryland are in this region. As I view it, the unemployment rate in the District and in Maryland is very small. Yet, with the huge work force the overall unemployment figure comes up to 6.3 percent for the South. I would view a lot of this difference as the result of government activity, big spending in Maryland and in the District.

Now I don't know about Delaware, right next door, but I keep pondering just what we are going to expect out of these budget cuts in employment and how severe an impact it's going to have and what we should be anticipating.

I don't know whether the fact that you have the South so big in employment has any bearing on our concerns, but why is it that big? Why is it that everything from Maryland and Delaware to El Paso is included in the same group and all points in between North and South?

Mrs. NORWOOD. The regional data that you are referring to are based on the four broad regions that were established for the analysis of population census data. The reason that we discuss those with you here at this hearing is because that is really all of the geographic detail, apart from 11 States that we publish data for, that we can get out of the national survey. It's just not large enough to give us data for all of the individual States that we would like.

Now we're working on some plans to try to change that, but we do have a program of local area unemployment rates. There are statistical difficulties with them, but we do produce them. What you see in the South are very real differences.

You have some of the oil producing States, particularly Louisiana and Texas, which are not doing very well at all. They have unemployment rates of 8 percent or more, considerably more. You have problems in West Virginia that we know about, and then you have other areas that are somewhere around the 4- to 6-percent range like California and Florida, all of which are in the South. We do, with a larger timelag have some information on them, not as much as we would like.

Senator MELCHER. I read in the Post that Christmas sales are off and the employment of part-time additional help is off. Did they get that from you or from their own surveys?

Mrs. NORWOOD. No. A lot of newspapers do their own surveys by going out to department stores and asking those officials what they are doing.

Senator MELCHER. You have a lot of statistics, but I don't want to get you further than your statistics indicate. But do your statistics support that? Do they bear that out?

Mrs. NORWOOD. We are seeing weakness in employment in retail trade particularly in department stores.

Senator MELCHER. Thank you.

Senator SARBANES. Congressman Solarz.

Representative SOLARZ. Thank you, Mr. Chairman. Mrs. Norwood, is there anything approaching a consensus among economists these days as to what unemployment rate would be consistent with a full-employment economy?

Mrs. NORWOOD. I think that most economists believe that it is higher than they used to believe it was. In the old days there was a lot of discussion about 2-, 3-, or 4-percent unemployment. Most of the literature suggests that a noninflationary unemployment rate is closer to, oh, perhaps 6 percent or 7 percent or 5 percent. But a lot of it depends upon people's value judgments.

Representative SOLARZ. What would you say would be consistent with a full-employment economy, that is other than frictional unemployment?

Mrs. NORWOOD. I really don't know. It seems to me that you have to look at this in a number of different ways. If you are an individual who is unemployed, it doesn't matter whether the country has full employment or whether anybody tells you that. You're in some real trouble.

I think the better way to look at this is to section out the groups who are unemployed and to look at what it is that is causing that unemployment. We have a million people who have been unemployed for more than 6 months. That's a very different situation from some of the people who are unemployed for 3 or 4 weeks.

Representative SOLARZ. I have to say that is not a very helpful answer. I agree with you that from the perspective of the person who is unemployed that it's small solace to be told that there is a full-employment economy going full steam ahead even though he or she doesn't have a job.

But as policymakers I think it's important for us to have some sense as to whether we are operating on a full-employment basis, in which case we could afford to take a somewhat relaxed view of the unemployment that exists on the theory that it is frictional and that a certain amount is inevitable as people move from one job to another and as certain businesses close down and others start up.

Whereas, on the other hand, if there is a gap of a couple of percentage points, a few million people between the number who are unemployed now and the lesser number who would be unemployed if we had a full-employment economy, that suggests the need for remedial action.

Can you give us any guidance here? What is the best thinking on this, what is the range at least and why has it gone up considerably from what it was when the consensus held it was around 3 percent?

Mrs. NORWOOD. Well, you have several questions there. Let me say that there are those, for example, the Council of Economic Advisers, who believe that we are very close to, if not really at full employment. There are other economists who look at the regional differences and say well, you may have full employment in New England, but you surely don't have it in the Southern region of the country.

There are those who look at some of the kinds of industrial restructuring we have with plant closings and isolated areas who become very concerned about discussions of full employment. And then there are those who argue, you know, do we have structural unemployment when we have a minority population that doesn't have jobs?

So I don't want to evade your question. I think it is clear that many economists, particularly those in the Council of Economic Advisers, who believe that 6 percent is probably fairly close to full employment.

Representative SOLARZ. Do you think that it's possible to drive down the unemployment rate from where it is now by a percent or more over the course of the next couple of years? Is that a feasible and desirable policy objective?

Mrs. NORWOOD. I would like to see unemployment lower because I think 7.1 million people is a lot of people who are unemployed and looking for work.

But one of the things that must be remembered is that the unemployment rate in this country has dropped from 10.8 percent in late 1982 to 5.9 percent, but the labor force has increased by almost 10 million during that period. So we really have had to increase the number of jobs by about 300,000 just to get a tenth off the unemployment rate. So what is possible under those circumstances, I don't really know.

Senator SARBANES. Would the gentleman yield?

Representative SOLARZ. I would be pleased to yield to the Chairman.

Senator SARBANES. I think the point that Congressman Solarz is making here is extremely important, and I think there is some concern that what constitutes full employment, there is a tremendous pressure to redefine it upwards so in effect you are more successful.

In other words, if you don't reach 3 percent, which is under some analyses a full-employment rate, and you keep not reaching it, then eventually you start saying, well, you know, full employment is really 5 percent and we shouldn't be too exercised about it.

Mrs. NORWOOD. That's right.

Senator SARBANES. Now let me ask you this question. You do your unemployment figures by regions, and you've submitted that data to us. Do you do your inflation figures by region?

Mrs. NORWOOD. Yes.

Senator SARBANES. Is there more inflation in the regions that have lower unemployment rates?

Mrs. NORWOOD. We could look at that and submit something for the record.

Senator SARBANES. I mean you have unemployment rates ranging here from 2.8 percent in the lowest region to 8.2 percent in the highest region. Now is there a correlation between those unemployment rates and the regional inflation rates?

Mrs. NORWOOD. We can look at that, Senator. We have the data, and we would be glad to submit them for the record.

[The following information was subsequently supplied for the record:]

Annual Average Civilian Unemployment Rates and Percent Changes in All Items Consumer Price Index for All Urban Consumers (CPI-U) for the 12 Months Ending in December, by Region, 1981-1987

Year and Indicator	Region			
	Northeast	North Central	South	West
1981				
Unemployment rate	7.4	8.6	7.0	7.4
CPI-U	9.0	7.1	10.0	9.8
1982				
Unemployment rate	9.0	11.1	8.9	9.9
CPI-U	4.0	6.3	3.7	1.3
1983				
Unemployment rate	8.7	10.8	9.3	9.5
CPI-U	4.0	3.4	3.6	4.2
1984				
Unemployment rate	6.8	8.4	7.2	7.6
CPI-U	4.2	3.2	4.0	4.5
1985				
Unemployment rate	6.2	8.0	7.2	7.3
CPI-U	4.4	3.3	3.2	4.1
1986				
Unemployment rate	5.6	7.3	7.6	7.1
CPI-U	1.7	.6	.9	1.4
1987*				
Unemployment rate	4.5	6.7	6.9	6.4
CPI-U	5.3	4.5	4.2	4.2

*12 Months ending November 1987
Source: Bureau of Labor Statistics
December 1987

Senator SARBANES. I'm concerned that there is just a redefinition of what constitutes full employment in order to give us a more comfortable situation.

Representative SOLARZ. Mr. Chairman, I share that concern precisely, and I wonder if it would be possible to ask Mrs. Norwood if she could submit for the record a survey of what the different organizations, like the Council of Economic Advisers and the CBO and prestigious independent economists are saying is a full-employment economy together with the reasoning behind their conclusion so that the committee could examine what the range of opinion is on this issue.

[The following information was subsequently supplied for the record:]

MEASUREMENT OF THE NATURAL RATE

Estimates of the natural rate of unemployment are inherently imprecise in that no single model can account for all the variables embodied in the concept. There is general agreement, however, that the natural rate increased during the 70's, but has shown some decline over the last 10 years. A review of the literature on the subject yields current estimates ranging from 4 to 7 percent. [Note: much of the literature on estimation procedures use the acronym NAIRU (non-accelerating inflation rate of unemployment) as a synonym for "natural rate".]

Recent estimates include:

--Congressional Budget Office, August 1987.

As the actual unemployment fell to 6.0 percent without evidence of supply constraints or strong inflationary pressures, the Office revised their estimate of the 1987 NAIRU downward from 6.0 to 5.7. The NAIRU is projected to decline through 1992 to 5.5 percent, largely as a result of the shrinking labor force shares of young persons.

--Council of Economic Advisors, January 1988.

A preliminary draft of the 1988 Economic Report of the President discusses in detail trends in unemployment, but does not provide a current estimate of the natural rate.

However, the report does conclude that further reductions in actual unemployment rates are possible without fueling inflation:

> "The relatively low rates of unemployment in Middle Atlantic, West North Central, South Atlantic, and especially the New England regions indicate that there is not an impenetrable barrier to achieving unemployment rates of 5 percent or less. If it can be done in these regions, where the characteristics of the labor force are not remarkably different from the country as a whole, then it should be possible in other regions as well."

--Richard Cantor and John Wenninger, Federal Reserve Bank of New York, Autumn 1987.

In analyzing the relation between unemployment rates and GNP growth, the authors suggest "that we could be approaching a point where inflationary pressures could emerge." After reviewing demographic factors, and industry and regional trends, they conclude:

> "Overall, our findings suggest that the NAIRU has shifted downward from the 6.5 to 7.0 percent range in the late 1970's to about 6 percent at present, although we will not know with confidence what the NAIRU is in the current cycle until we actually see firm evidence of upward movements in wages."

--Mark Zandi, Wharton Econometric Forecasting Associates, November 1987.

In reviewing the concept of the natural rate and assessing the possibility of renewed wage inflation, a variety of factors are presented pointing to further wage inflation as unlikely. Specifically, the relatively high

unemployment rates of prime age males represent an untapped supply of labor, and, in recent contract talks, the job security issue has appeared to take precedence over wage increases. Finally, a demographically adjusted unemployment rate was constructed which yields a current natural rate of 5.4 percent. The report concludes, "Since our current forecast calls for growth averaging closer to 2.5% through 1988, there is no risk of major wage-cost push inflation in the remainder of this decade."

--Richard S. Krashevski, Dept. of Research, AFL-CIO.

"The present circumstances--an abundance of unused capacity, joblessness far above the feasible minimum, and moderate inflation-- all signal that unemployment can be cut further without quickening inflation's pace."

"Today, as in the 1960's, full employment is an unemployment rate no higher than 4 percent."

--Michael K. Evans, Evans Econometrics, "Industry Week," 8/24/87.

Citing demographic factors and foreign competition's ability to restrain wage increases, the author states, "the full-employment rate has now declined to about 5 percent."

Representative SOLARZ. But while we're here could you tell us why isn't zero unemployment the definition of full employment and in what sense could we have full employment when you have several million unemployed?

Mrs. NORWOOD. I don't think we can ever get to zero unemployment because there are always people in this country who move around, who leave jobs and who come into the labor force. We have a lot of students who in the summertime look for jobs. You will always have some movement.

The question is really how much of that movement is caused by the economy not being able to cope with the numbers of people who are there.

Representative SOLARZ. Well, let me ask what may be a naive question. I fully agree with you that there will always be some people coming into the labor market and it takes them a certain amount of time to get a job, and there will always be other people who decide to leave a job. They don't like it and it takes them a little bit of time to find another job.

Why shouldn't the definition of full employment be no more than the number of people coming into the labor market with a reasonable amount of time for them to look for a job, plus the number of people who voluntarily leave a job, plus a reasonable amount of time to look for another job, and then if that came to 3 percent of the total work force that would be full employment.

But if you add to that people who are thrown out of their jobs or people who leave a job voluntarily and then it takes them 2 years to find another job even though they want to work, or you add to it people who enter the labor force for the first time and after a year later they are still looking for a job, that doesn't seem to me to be something which logically fits into the concept of full employment as you described it.

So I should think if you look at it in those terms it would be possible for you to make some estimate as to the number of people who voluntarily left jobs and who have been looking for work say for less than 2 or 3 months, whatever is considered a reasonable period of time to find another job, and the number of people who have just entered the labor market within 2 or 3 months, which is a reasonable period of time to find a job and say what percentage of the unemployment rate is that. Do you have that figure?

Mrs. NORWOOD. We do have figures on the number of job leavers in any particular month, and we can tell you how many have lost their jobs, how many people are on temporary layoff from a job expecting to be called back and how many people have actually left their job in that month.

Now it's somewhat difficult in this survey, which gives you a snapshot of what is going on each month, to relate these variables over a period of some time. We are working on that and trying to improve the longitudinal characteristics of the current population survey.

To return to the data, there were about a million, 910,000 job leavers in November, that is people who voluntarily left their job.

Representative SOLARZ. 110,000?

Mrs. NORWOOD. 910,000. So that's roughly a seventh of the 7.1 million unemployed. It's 12.8 percent of the unemployed, in November.

Among the unemployed, 47 percent were job losers, 12.8 percent were job leavers, and about 28 percent were people that had been in the labor force, left it and came back in as reentrants.

Representative SOLARZ. Mr. Chairman, I see my time has expired.

Senator SARBANES. I took some of your time. Why don't you go ahead.

Representative SOLARZ. This sounds to me like intellectual gobbledygook—and I'm not saying what you said—but it is this notion that a full-employment economy may be 6-percent unemployment. You're telling me that roughly a million people voluntarily left their jobs and they are still looking for work. I don't know what the figure is as to the number of new workers who haven't yet found jobs, and let's say that's another million or so. So that would be 2 million people.

It would seem to me then that a more reasonable and realistic judgment of full employment might be 2 percent, which seems to be the percentage of the work force that are out of work because they voluntarily left jobs or because they just came in and haven't yet been able to find jobs.

Perhaps you can explain to me on what basis other economists triple that figure and come up with another 4 percent, saying that 6 percent is full employment.

Mrs. NORWOOD. It's really that they double that figure because there are 2 million people roughly that have reentered, and then there are the million that we were talking about who left. So some people look at those two groups that you're talking about as the frictional unemployment and they say, well, that is roughly 3 percent or somewhere in that neighborhood.

But then you get other people who add to that a variety of different kinds of situations. There are those who suggest that some of the unemployed don't really look for work very hard and they focus on some systems in this country which provide for payments to be made. Some conservative economists allege that you have to take account of that.

Then there are those who look at this not from a micro sense of looking at these specific groups of people and their problems, but they come at it from a macro sense and they say we have an inflation problem, and ask how much can we expand the economy without really pushing inflation up?

So what they tend to do is to look more at what the pressures are on inflation, where they are, and then try to translate that back into the unemployment rate.

Representative SOLARZ. How many discouraged workers are there?

Mrs. NORWOOD. About a million.

Representative SOLARZ. A million, and if you added them to those who are now counted in the unemployment rate, what would the unemployment rate be?

Mrs. NORWOOD. That's U–7, that's about 9 percent.

Representative SOLARZ. Nine percent. And if you added to that the part-time workers who would like full-time work——

Mrs. NORWOOD. That's included in the figure I gave you.

Representative SOLARZ. So the figure you gave me——

Mrs. NORWOOD. It's the most inclusive. It includes half of the part-time workers, assuming they are working half of the week, plus the discouraged, and that's about 9 percent.

Representative SOLARZ. And how does that compare historically to that comprehensive unemployment rate over the course of the last say two decades? Do you know?

Mr. PLEWES. The discouraged worker part has moved essentially with the unemployment rate. The part time for economic reasons is somewhat above the historical standard. So that rate is somewhat above that experienced in the past.

Representative SOLARZ. I mean if we just looked at the official unemployment rate rather than the comprehensive one, we could assume that the comprehensive rate would be moving in tandem with the official unemployment rate?

Mrs. NORWOOD. Generally they do. We chart them from time to time and it's just that one is higher than the other. They all go up in time of recession, and then in recovery they come down.

But as Mr. Plewes has pointed out, we do have 5.5 million people working part time for economic reasons now which at this stage of an expansion is really quite a large number.

Representative SOLARZ. It's clear from your figures that there has been a substantial decline in the unemployment rate over the last 6 years. Has there been a comparable decline in the comprehensive unemployment rate, which includes discouraged workers and part-time workers seeking full-time employment?

Mrs. NORWOOD. Generally so, yes, and perhaps slightly less because of this part time for economic reasons, but not a lot different.

Representative SOLARZ. Could you give us the precise figures?

Mrs. NORWOOD. Yes, we would be glad to.

Representative SOLARZ. Fine.

[The following information was subsequently supplied for the record:]

JAN 14 1988

Honorable Stephen J. Solarz
House of Representatives
Washington, D.C. 20515

Dear Congressman Solarz:

This is a follow-up to my appearance at the Joint Economic Committee hearing of December 4, 1987 when I promised additional information on two topics. The first one was a comparison between the official civilian unemployment rate and an alternative rate that also takes into account discouraged workers and persons working part time for economic reasons. The second topic was a summary of current thinking on the "full-employment unemployment rate."

This letter deals with the first topic. With regard to the second topic, we are currently examining the literature and hope to provide you with a brief summary of our findings within the next few weeks.

I have enclosed a chart, Selected Unemployment Rates 1970-87, that shows how the official unemployment rate (U5-b) and the U-7 alternative rate have performed over the various business cycles since 1970. (The technical definitions of the two rates are provided on the bottom of the chart.) As you can see, the two series have shown very similar movements, although the gap between them has widened slightly during the 1980's.

The widening of the gap over this period reflects the fact that, for various reasons, the number of persons on part-time work schedules for economic reasons--also referred to as involuntary part-time workers--has not declined as rapidly as has the number of unemployed. The number of discouraged workers, which is the third element taken into account in the computation of the U-7 rate, has actually declined more rapidly than the number of unemployed over this 5-year period.

JAN 4 1988

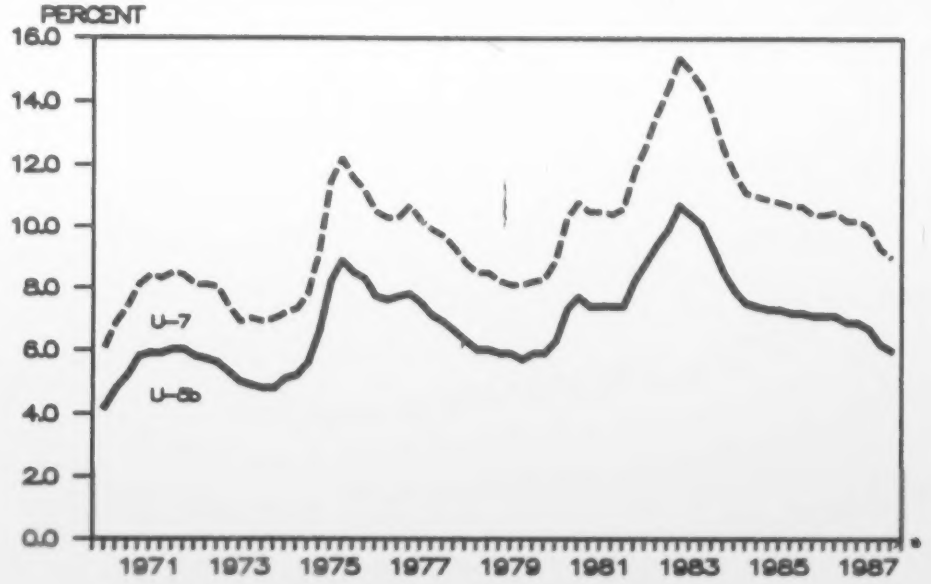
I hope this information is helpful to you. As promised, I will forward our findings on the full-employment issue as soon as possible.

Sincerely yours,

JANET L. NORWOOD
Commissioner

Enclosure

SELECTED UNEMPLOYMENT RATES, 1970–87



U-6b= Total unemployed as a percent of the civilian labor force.

U-7= Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/2 total on part time for economic reasons plus discouraged workers as a percent of the civilian labor force plus discouraged workers less 1/2 of the part-time labor force.

DEPARTMENT OF LABOR
Bureau of Labor Statistics

Representative SOLARZ. Just one final question, Mr. Chairman. I notice you've broken down your unemployment figures by race, among other categories. Do you have the unemployment figure for Hispanics?

Mrs. NORWOOD. Yes. It is 9.1 percent in November, and that is higher than——

Representative SOLARZ. That is higher than for whites but less than for blacks.

Mrs. NORWOOD. Yes, that's right. That figure jumps around quite a lot and needs to be looked at over some considerable period of time. Hispanics are a relatively small group in the population, but they seem to be coming into the labor force in very large numbers over the last year.

Mr. PLEWES. About 25 percent of the labor force additions in the past year have been Hispanic persons.

Representative SOLARZ. Are they regionally identifiable?

Mr. PLEWES. We haven't broken them out that way. We can. Certainly there are heavier impacts in some regions.

Representative SOLARZ. Do you have any way of knowing to what extent the disproportionately high rate of black unemployment is due to a lack of skills associated with poverty or related factors and how much of it is due to racism in this society? Do you have any way of getting at that discrimination?

Mrs. NORWOOD. No, not really.

Representative SOLARZ. Do you have any thoughts on it?

Mrs. NORWOOD. Lots of them, but I don't have a lot of factual evidence. It seems clear to me that a large part of the reason for the very high-unemployment rate for black teenagers has to be a lack of preparation, a lack of training and perhaps even more important the kind of circumstances in which these kids live, which is not particularly conducive to a learning experience.

I think that unemployment rate for black teenagers, which is now 34.3 percent, and it's true it was 50 percent or more in the recession, is a tremendously high rate.

Now black women have always worked. They have always had a fairly high labor force participation. They have an unemployment rate of about 10 percent, and black men also have difficulty in the labor market. How much of their rates are due to training and how much of it is due to where they live, I can't say. They may live in areas where there aren't any jobs, but how much of it is due to discrimination is really very difficult to determine.

Representative SOLARZ. Thank you very much, Mr. Chairman.

Senator MELCHER. Mrs. Norwood, the budget cuts are supposed to stabilize or help stabilize the stock market. I'm not so sure that that will occur, but that's what is the general feeling, that it will help.

Receipts are projected to climb in the Economic Indicators from the Council of Economic Advisers, not in the personal income tax and probably not in the corporate tax either, but in taxes levied for the purposes of Social Security and Medicare.

The employment rates then are very significant for that projection because if employment would go down, those receipts would go down. And because of this arrangement we have where trust funds are counted as part of the overall budget, the receipts that go into

those trust funds, particularly Social Security and Medicare, are very significant.

In this room where we meet, which is usually on an average of a little over once a month, the Special Committee on Aging also uses this room. The elderly are rather resentful that while the trust funds are building up for Social Security retirement, we tinker from time to time or threaten to tinker in Congress with the cost-of-living adjustment or some of the other benefits that they might receive.

Now we have to project out over this next year what we do in that regard. It isn't just that the increase in Social Security taxes, which goes into effect on January 1, is a fairly substantial increase, and that's primarily why I believe the Council of Economic Advisers is projecting revenues upward.

What should we expect in the balance of fiscal 1988 in employment because we are going to have to make some judgments right now on what we do about Medicare and how strongly we defend COLA's?

Mrs. NORWOOD. I can't really answer all of your question there, Senator. The Congressional Budget Office has been doing a great deal of work to try to estimate exactly what the revenues will be and how they are related to Social Security.

May I just say that I think there are two points that are related to your comment.

One is that the trust funds are building up, but the major concern appears to be what will happen later into the next century when the age profile of the population has shifted and there are fewer people working to support, to pay into the Social Security system. That's a policy issue I certainly don't want to get into.

Senator MELCHER. That's about the year 2030 though.

Mrs. NORWOOD. Well, it's somewhere in the future, but that is I think what most of that discussion has been related to.

Senator MELCHER. It looks like it climbs to 2030.

Mrs. NORWOOD. It's clearly going to be a problem sometime in the future because the people who are now working are growing older and the group coming behind them is a much smaller group.

The other question is the price escalation, and the issue really is whether the escalation of Social Security benefits is greater than the increase in earnings of people who are working, and that's a question that again is a policy question, but I think that's part of the issue in the discussion.

Senator MELCHER. Well, I don't disagree with what you describe as the issues. I'm just asking what should we anticipate on unemployment rates as we try to make these decisions for the balance of this fiscal year?

Mrs. NORWOOD. I think all I can say to that is that question needs to be addressed to the Congressional Budget Office which has a very good reputation for objective forecasting. We don't do short-term forecasts. We just report on what has actually happened.

Senator MELCHER. You can't make any projections at all?

Mrs. NORWOOD. No, except we do look 15 to 20 years into the future and we have released projections to the year 2000, but we don't look at the near term. We look at future occupational demand.

Senator MELCHER. You don't look at anything for the coming year?

Mrs. NORWOOD. No, sir.

Senator MELCHER. Thank you.

Senator SARBANES. Commissioner, the material that Congressman Solarz asked for, we're very interested in obtaining that material so we can pursue that subject.

Mrs. NORWOOD. We'll try.

Senator SARBANES. And in that regard I'm interested in this point about your inflation figures. Do you do them on the same regions on which you do your unemployment fugures?

Mrs. NORWOOD. No. We have consumer price indexes which are calculated by area and by city size. We have four areas.

Mr. DALTON. We have the four census regions.

Mrs. NORWOOD. We do have those.

Mr. DALTON. But not below that.

Senator SARBANES. You don't have this 11-region breakdown?

Mrs. NORWOOD. No.

Senator SARBANES. Well, can you look at that? It would be very interesting indeed to discover that a region that was at 3-percent unemployment as compared with a region that was at 9-percent unemployment was not experiencing any significant differences in price movements in their region.

Now I know that it's not that simple, but nevertheless that would be interesting. Or even if they were experiencing price differences, it would depend on what order of magnitude they were as well.

Representative SOLARZ. Mr. Chairman, if I may ask one final question.

Senator SARBANES. Yes.

Representative SOLARZ. I've heard it said frequently in recent months that we are now in the midst of the longest prolonged peacetime economic growth in terms of jobs that we've had since presumably I don't know when.

Is this true, and what is meant by peacetime here?

Mrs. NORWOOD. It is true. It is post-World War II. It does not include Vietnam, of course, but the other point, if I may just say, it of course comes after an extraordinarily steep recession. And generally in business cycle analysis the steeper the recession, the more vigorous the recovery that follows at least in the early stages.

Representative SOLARZ. When you say it doesn't include Vietnam, what do you mean?

Mr. PLEWES. It does not include the period from February 1961 to December 1969, which was a very long period of expansion.

Representative SOLARZ. In other words, we had a longer expansion during that period?

Mr. PLEWES. That was a longer expansion than during the current period, that is correct.

Representative SOLARZ. So it excludes Vietnam?

Mrs. NORWOOD. Yes, because we're talking about peacetime.

Representative SOLARZ. I mean that assumes we were at war.

Mrs. NORWOOD. That's a different question and we shouldn't get into it I guess.

Representative SOLARZ. How many years has this expansion been going on now?

Mr. PLEWES. We have a 60-month expansion going on as of this month. It is shorter than the expansion that went from February 1961 to December 1969, but during that period of course we were in Vietnam.

Representative SOLARZ. But we weren't in Vietnam in any size until 1965–66. I mean you can't write off 1961, 1962, and 1963.

Mrs. NORWOOD. Well, we're not writing off anything. We are just telling you what the facts are. In general, in a business cycle and the people who are specialists in business cycle analysis talk about it in these terms.

We can give you, as a matter of fact, and we would be glad to submit it for the record, the particular time periods and what happened.

[The following information was subsequently supplied for the record:]

Official Peaks and Troughs of the Post-war Business Cycles

Peak	Trough
November 1948	October 1949
July 1953	May 1954
August 1957	April 1958
April 1960	February 1961
December 1969	November 1970
November 1973	March 1975
January 1980	July 1980
July 1981	November 1982

High and Low Points of the Unemployment Rate During Each of the Business Cycles

Low	High
October 1948 - 3.7	October 1949 - 7.9
June 1953 - 2.5	September 1954 - 6.1
March 1957 - 3.7	July 1958 - 7.5
February 1960 - 4.8	May 1961 - 7.1
September 1968- May 1969 - 3.4	August 1971 - 6.1
October 1973 - 4.6	May 1975 - 9.0
May 1979 - 5.6	July 1980 - 7.8
April 1981 - 7.2	November-December 1982 - 10.7

Senator SARBANES. Well, if you've gone into the deepest recession that you've been in for 50 years, the fact that you've moved up from it over a period of time is less significant, is it not, and easier to do?

Mrs. NORWOOD. Yes.

Senator SARBANES. I mean if you start from an 11-percent unemployment rate, you're way down. So you can kind of keep coming up.

Mrs. NORWOOD. That was the point that I was trying to make earlier, that we should not forget that the 1981–82 recession was one of the sharpest and steepest that we have had in a very, very long time, and some people feel it was almost as bad as the recession of the 1930's.

Senator SARBANES. And I am struck by how fast that recession came. Is my memory correct on that?

Mrs. NORWOOD. Yes.

Senator SARBANES. I mean how quickly the economy went down.

Mrs. NORWOOD. Yes, it went down fast and it was steep. The expansion, in that Vietnam period from 1961 to 1969 the expansion lasted 106 months, but anything beyond that was really, even the 1975 to 1980 expansion lasted 58 months. So this is the longest expansionary period since World War II apart from the 1961–69 period.

Senator SARBANES. Thank you very much. We are very pleased to have you back with us.

[Whereupon, at 10:47 a.m., the committee adjourned, subject to the call of the Chair.]

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, JANUARY 8, 1988

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, DC.

The committee met, pursuant to notice, at 9:30 a.m., in room SD-628, Dirksen Senate Office Building, Hon. William Proxmire (member of the committee) presiding.

Present: Senator Proxmire.

Also present: William Buechner, professional staff member.

OPENING STATEMENT OF SENATOR PROXMIRE, PRESIDING

Senator PROXMIRE. Commissioner Norwood, welcome to the Joint Economic Committee. Rain or snow or dark of night doesn't prevent Commissioner Norwood from appearing with her two remarkably able and strong, able to resist any kind of weather companions. It is great to have you here.

The employment and unemployment figures for December were encouraging, and, of course, they were very encouraging for all of 1987. It was quite a year, with a steady decline in unemployment. I understand that it is now one of the biggest drops of any year, certainly recently, in unemployment, and it is now down to 5.8 percent. It is a decrease of 0.9 of 1 percent since the beginning of the year, and while most of the new jobs still are in the service industries, it is interesting and encouraging that there has been an increase in the last month, I understand, in manufacturing and the volume of our exports is increasing even though the balance of trade statistics are bad because, of course, they are based on a dollar which has been declining in value.

And all segments of the labor market I understand improved. For whites, the unemployment rate fell to 4.9 percent compared to 5.8 percent a year ago. For blacks, the unemployment rate fell to 12.2 percent from 13.7 percent. Of course, that 12.2 percent is still a discouragingly high level. For the population as a whole it would be a depression, and it is one of the real problems we have that black unemployment is as high as it is.

Adult women, unemployment fell to 5.2 percent from 5.8 percent. Teenagers also showed an improved labor market situation, but that is also very high, and, of course, for black teenagers it is a serious national problem.

The bad news occurred, it seems, in productivity—perhaps you would like to comment on that later—and to some extent inflation. It is a little unfair to compare the inflation figures because they were so good in 1986, that although the inflation is still moderate

as compared to what we have suffered in the past it still represents a big increase.

Here is the inflation for all of 1986. It was 1.1 percent, and as you can see, it went up fairly steadily and is now at its peak for November, the figures we have, 4.5 percent. Arithmetically, that is a huge increase. On the other hand, 4.5 percent in the late 1970's, early 1980's would have been considered a terrific year. But it is still a serious increase and something that we might want to talk about to some extent.

I would like to ask you when you finish your statement as to what economic policies of the Congress and the administration—I don't mean to be critical of the administration or the Congress—but what contributed to the improvement in unemployment and the fact that, in general, the economy did quite well in 1987? Was this simply an accident that happened in spite of the Congress, or was it something that some of our policies encouraged?

Go right ahead.

STATEMENT OF HON. JANET L. NORWOOD, COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY THOMAS J. PLEWES, ASSOCIATE COMMISSIONER, OFFICE OF EMPLOYMENT AND UNEMPLOYMENT STATISTICS; AND KENNETH V. DALTON, ASSOCIATE COMMISSIONER, OFFICE OF PRICES AND LIVING CONDITIONS

Mrs. NORWOOD. Thank you, Mr. Chairman.

We are very happy to be here, and as always, Mr. Dalton, our price expert, is here, as is Mr. Plewes, our employment expert.

The labor market showed strength throughout most of last year, and the December figures continued that pattern of growth. Employment continued to rise at a brisk pace, and the rate of unemployment, while little changed in recent months, was down nearly a full percentage point from a year earlier.

The overall jobless rate was 5.7 percent in December, and the rate for civilian workers was 5.8 percent. Both rates were at their lowest points since mid-1979.

Payroll employment, as measured by the BLS business survey, rose by 325,000 from November to December. That increase was one of the largest monthly changes in a year of robust growth which added 3 million jobs to the economy.

Factory jobs continued to expand in December, as another 40,000 workers were added to payrolls. Since last December, the Nation's factory payrolls have risen by more than 400,000 jobs, mostly in just the last 6 months. Over those 6 months only two of the manufacturing industries for which data are published in our release—autos and tobacco—have not shown some growth.

In December, however, factory growth was not so widespread as in November; machinery and electrical equipment accounted for half of the manufacturing increase. Although the factory workweek was down a tenth of an hour, work schedules continue to be very high by historical standards.

Elsewhere in the goods-producing sector, construction employment was up for the third month in a row, ending the year with about 200,000 more jobs than a year ago. Although the number of

jobs in mining was little changed from November to December, the December level of 760,000 was more than 40,000 above last January's recent low point in this series.

The lion's share of December job growth in the service-producing sector was in the services industry itself. Business and health services, the largest component of that industry, together accounted for about one-half of the service industry's increase.

Since the October stock market crash, a great deal of attention has been focused on jobs in finance, insurance, and real estate. Actually, employment growth in that industry, which had been very strong throughout most of the current expansionary period, had already begun to slow last spring, partly as a result of weakness in banking. Employment levels had not changed much by December, but, as we discussed last month, it takes time for changes to take effect.

The retail trade industry also has been subjected to scrutiny, as economists review the effect of the stock market decline on consumer attitudes toward consumption and savings. Employment in retail trade has changed very little over the past 2 months, but general merchandise stores have shown particular weakness. Final December sales figures are not yet available, however, and we need more time to determine what is happening.

The civilian worker unemployment rate of 5.8 percent in December, although little changed over the month, was down substantially over the year.

Consistent with the recent employment increases in manufacturing, the jobless rate for adult men declined 1.1 percentage points over the year, nearly double the improvement for women. However, the unemployment rate for teenagers—at 16.1 percent—showed very little improvement from a year earlier. Particularly, high unemployment continued to be concentrated in central cities, and, as we have often discussed at these hearings, the experience of black teenagers in finding jobs is far worse than that of white teenagers.

As we review 1987's labor market developments, the highlight certainly has been the strong employment growth—3 million in each of our surveys. Such a pattern of accelerating growth this far into an expansion is quite unusual.

Perhaps the most encouraging development has been the renewed strength in factory employment, particularly in export-related industries. The factory workweek also has remained at very high levels. Employment in mining recovered slightly over the year but remains nearly half a million below its March 1982 peak level. Construction gains, although unevenly distributed throughout the year, were, nevertheless, fairly substantial. The services industry continued its unwavering uptrend, but, at year's end, the course of the retail trade and finance industries was less clear.

Although overall joblessness improved, especially in the first half of the year, we must still be concerned about the several types of problems that persist. Although the number of jobless looking for work for 6 months or more is down by nearly a quarter of a million since last December, this group still totals 900,000. The number working part time, even though they would prefer full-time work, remains more than 5 million. Minority youth continue to have dif-

ficulty in finding jobs, and the number of discouraged workers, although down considerably from last year, is still 900,000.

In spite of these problem areas, however, we must give very high marks to the performance of the overall labor market during 1987.

We would be glad to try to answer any questions you have.

[The table attached to Mrs. Norwood's statement, together with the Employment Situation press release, follows:]

Unemployment rates of all civilian workers by alternative seasonal adjustment methods

Month and year	Unadjusted rate	X-11 ARIMA method						X-11 method (official method before 1980)	Range (cols. 2-8)
		Official procedure	Concurrent (as first computed)	Concurrent (revised)	Stable	Total	Residual		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1986									
December....	6.3	6.7	6.7	6.7	6.6	6.7	6.7	6.7	.1
1987									
January.....	7.3	6.7	6.7	6.7	6.7	6.7	6.6	6.7	.1
February....	7.2	6.6	6.6	6.6	6.6	6.6	6.6	6.7	.1
March.....	6.9	6.5	6.5	6.5	6.6	6.5	6.5	6.6	.1
April.....	6.2	6.3	6.3	6.3	6.4	6.3	6.3	6.3	.1
May.....	6.1	6.3	6.3	6.3	6.3	6.3	6.5	6.3	.2
June.....	6.3	6.1	6.1	6.1	6.1	6.1	6.2	6.1	.1
July.....	6.1	6.0	6.0	6.0	6.0	6.1	6.1	6.0	.1
August.....	5.8	6.0	6.0	6.0	6.0	6.1	6.1	6.0	.1
September...	5.7	5.9	5.9	5.9	6.0	5.9	5.9	5.9	.1
October.....	5.7	6.0	6.0	6.0	6.0	5.9	6.0	6.0	.1
November....	5.6	5.9	5.9	5.9	5.9	5.9	5.9	5.9	-
December....	5.4	5.8	5.8	5.8	5.7	5.7	5.8	5.8	.1

SOURCE: U.S. DEPARTMENT OF LABOR
Bureau of Labor Statistics
January 1988

(1) Unadjusted rate. Unemployment rate for all civilian workers, not seasonally adjusted.

(2) Official procedure (X-11 ARIMA method). The published seasonally adjusted rate for all civilian workers. Each of the 3 major civilian labor force components--agricultural employment, nonagricultural employment and unemployment--for 4 age-sex groups--males and females, ages 16-19 and 20 years and over--are seasonally adjusted independently using data from January 1974 forward. The data series for each of these 12 components are extended by a year at each end of the original series using ARIMA (Auto-Regressive, Integrated, Moving Average) models chosen specifically for each series. Each extended series is then seasonally adjusted with the X-11 portion of the X-11 ARIMA program. The 4 teenage unemployment and nonagricultural employment components are adjusted with the additive adjustment model, while the other components are adjusted with the multiplicative model. The unemployment rate is computed by summing the 4 seasonally adjusted unemployment components and calculating that total as a percent of the civilian labor force total derived by summing all 12 seasonally adjusted components. All the seasonally adjusted series are revised at the end of each year. Extrapolated factors for January-June are computed at the beginning of each year; extrapolated factors for July-December are computed in the middle of the year after the June data become available. Each set of 6-month factors are published in advance, in the January and July issues, respectively, of Employment and Earnings.

(3) Concurrent (as first computed, X-11 ARIMA method). The official procedure for computation of the rate for all civilian workers using the 12 components is followed except that extrapolated factors are not used at all. Each component is seasonally adjusted with the X-11 ARIMA program each month as the most recent data become available. Rates for each month of the current year are shown as first computed; they are revised only once each year, at the end of the year when data for the full year become available. For example, the rate for January 1984 would be based, during 1984, on the adjustment of data from the period January 1974 through January 1984.

(4) Concurrent (revised, X-11 ARIMA method). The procedure used is identical to (3) above, and the rate for the current month (the last month displayed) will always be the same in the two columns. However, all previous months are subject to revision each month based on the seasonal adjustment of all the components with data through the current month.

(5) Stable (X-11 ARIMA method). Each of the 12 civilian labor force components is extended using ARIMA models as in the official procedure and then run through the X-11 part of the program using the stable option. This option assumes that seasonal patterns are basically constant from year-to-year and computes final seasonal factors as unweighted averages of all the seasonal-irregular components for each month across the entire span of the period adjusted. As in the official procedure, factors are extrapolated in 6-month intervals and the series are revised at the end of each year. The procedure for computation of the rate from the seasonally adjusted components is also identical to the official procedure.

(6) Total (X-11 ARIMA method). This is one alternative aggregation procedure, in which total unemployment and civilian labor force levels are extended with ARIMA models and directly adjusted with multiplicative adjustment models in the X-11 part of the program. The rate is computed by taking seasonally adjusted total unemployment as a percent of seasonally adjusted total civilian labor force. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(7) Residual (X-11 ARIMA method). This is another alternative aggregation method, in which total civilian employment and civilian labor force levels are extended using ARIMA models and then directly adjusted with multiplicative adjustment models. The seasonally adjusted unemployment level is derived by subtracting seasonally adjusted employment from seasonally adjusted labor force. The rate is then computed by taking the derived unemployment level as a percent of the labor force level. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(8) X-11 method (official method before 1980). The method for computation of the official procedure is used except that the series are not extended with ARIMA models and the factors are projected in 12-month intervals. The standard X-11 program is used to perform the seasonal adjustment.

Methods of Adjustment: The X-11 ARIMA method was developed at Statistics Canada by the Seasonal Adjustment and Times Series Staff under the direction of Estela Bee Dagum. The method is described in The X-11 ARIMA Seasonal Adjustment Method, by Estela Bee Dagum, Statistics Canada Catalogue No. 12-564E, February 1980.

The standard X-11 method is described in X-11 Variant of the Census Method II Seasonal Adjustment Program, by Julius Shiskin, Allan Young and John Musgrave (Technical Paper No. 15, Bureau of the Census, 1967).

News United States Department of Labor
Bureau of Labor Statistics Washington, D.C. 20212

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523-1959
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USDL 88-3

TRANSMISSION OF MATERIAL IN THIS RELEASE IS EMBARGOED UNTIL 8:30 A.M. (EST), FRIDAY, JANUARY 8, 1988

THE EMPLOYMENT SITUATION: DECEMBER 1987

Employment continued to increase in December and unemployment was little changed, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. The overall unemployment rate was 5.7 percent, and the rate for civilian workers was 5.8 percent. While little different from November, both rates have declined nearly a percentage point during 1987.

The number of nonagricultural wage and salary jobs--as measured by the monthly survey of establishments--increased by 325,000 in December to 103.6 million. Civilian employment--as measured by the monthly survey of households--rose by 240,000 to 113.7 million. Over the past year, job growth in both surveys has totaled about 3 million.

Unemployment (Household Survey Data)

The number of unemployed persons, at 7.0 million in December, and the civilian unemployment rate, at 5.8 percent, seasonally adjusted, were little changed from November but have edged down from this past summer's levels. Both of these measures have improved markedly during 1987. This improvement largely reflects a decline in the number of unemployed persons who lost their last job. (See tables A-2 and A-8.)

In December, there was little or no change in the jobless rates for adult men (4.9 percent), adult women (5.2 percent), teenagers (16.1 percent), whites (4.9 percent), and blacks (12.2 percent). The unemployment rate for Hispanics, which is often more volatile than those for whites and blacks, declined to 8.1 percent in December, a return to its general level of the July-to-October period. Jobless rates for nearly all worker groups showed considerable improvement over the year. (See tables A-2 and A-3.)

The mean duration of unemployment, at 14.2 weeks, and the median duration, at 6.0 weeks, were about unchanged from November. However, in

This release incorporates annual revisions in seasonally adjusted unemployment and other labor force series derived from the household survey. Information on the revisions appears on page 5.

line with the general improvement in unemployment, both measures showed a decline in duration of about 1 week compared with year-earlier levels.

Civilian Employment and the Labor Force (Household Survey Data)

Civilian employment rose by 240,000 in December to 113.7 million, and the percentage of the population with jobs held at a high of 61.9 percent.

Table A. Major indicators of labor market activity, seasonally adjusted

Category	Quarterly averages 1987 III	Quarterly averages 1987 IV	Monthly data 1987 Oct.	Monthly data 1987 Nov.	Monthly data 1987 Dec.	Nov.-Dec. change
HOUSEHOLD DATA			Thousands of persons			
Labor force 1/.....	121,786	122,316	122,128	122,349	122,472	123
Total employment 1/..	114,587	115,235	114,951	115,259	115,494	235
Civilian labor force...	120,053	120,568	120,387	120,594	120,722	128
Civilian employment..	112,854	113,486	113,210	113,504	113,744	240
Unemployment.....	7,199	7,082	7,177	7,090	6,978	-112
Not in labor force.....	62,963	62,899	62,924	62,876	62,898	22
Discouraged workers..	992	910	N.A.	N.A.	N.A.	N.A.
			Percent of labor force			
Unemployment rates:						
All workers 1/.....	5.9	5.8	5.9	5.8	5.7	-0.1
All civilian workers.	6.0	5.9	6.0	5.9	5.8	-.1
Adult men.....	5.2	5.0	5.1	5.0	4.9	-.1
Adult women.....	5.3	5.2	5.2	5.2	5.2	0
Teenagers.....	16.1	16.6	17.2	16.6	16.1	-.5
White.....	5.1	5.0	5.2	5.1	4.9	-.2
Black.....	12.5	12.2	12.1	12.2	12.2	0
Hispanic origin....	8.1	8.5	8.3	9.0	8.1	-.9
ESTABLISHMENT DATA			Thousands of jobs			
Nonfarm employment.....	102,278	p103,267	102,983	p103,246	p103,572	p326
Goods-producing.....	24,884	p25,169	25,064	p25,173	p25,270	p97
Service-producing....	77,394	p78,098	77,919	p78,073	p78,302	p229
			Hours of work			
Average weekly hours:						
Total private.....	34.8	p34.8	34.9	p34.9	p34.7	p-0.2
Manufacturing.....	40.9	p41.2	41.3	p41.2	p41.1	p-.1
Overtime.....	3.7	p3.9	4.0	p3.9	p3.9	p0

1/ Includes the resident Armed Forces. N.A.=not available.
p=preliminary.
NOTE: Household data have been revised based on the experience through December 1987.

During the course of 1987, civilian employment has increased by 3.1 million, the largest annual gain since 1984. (See table A-2.)

The civilian labor force was little changed in December at 120.7 million. Over the past year, the labor force grew by 2.2 million, with adult women comprising about two-thirds of the increase.

Discouraged Workers (Household Survey Data)

The number of discouraged workers--persons who want to work but do not look for jobs because they believe that they cannot find any--declined to about 900,000 in the fourth quarter of 1987, the lowest level since the fourth quarter of 1979. The discouraged total was down by more than 200,000, or 20 percent, from a year earlier. Women and blacks continued to comprise disproportionately large shares of all discouraged workers. (See table A-14.)

Industry Payroll Employment (Establishment Survey Data)

Total nonagricultural employment rose by 325,000 in December, seasonally adjusted, to a level of 103.6 million. As has often been the case in recent years, the services industry paced the over-the-month gains, but there were also further job increases in construction and manufacturing. (See table B-1.)

Manufacturing employment grew for the sixth straight month, adding another 40,000 jobs in December. The growth was not quite as widespread as the month before, however, as two components, machinery and electrical equipment, were responsible for half of manufacturing's overall increase. Employment in the motor vehicles and equipment industry was essentially unchanged over the month but, in contrast to the trend for the whole of manufacturing, has been edging down; it is now nearly 60,000 below its early 1986 level.

Construction, up 55,000, after seasonal adjustment, ended the year with its third consecutive monthly increase. At 5.1 million, construction employment was 200,000 above a year earlier.

Within the service-producing sector, the services industry rose sharply in December, by 145,000, as business services (35,000) and health services (40,000) led the way. Wholesale trade, dominated by an increase in its durable goods component, rose 20,000. Retail trade employment, in contrast, was flat for the second consecutive month, as jobs in general merchandise stores showed a seasonally adjusted drop of 35,000 over the October-December period. Employment in finance, insurance, and real estate, which has been growing at a slower pace in recent months compared to the prior 4 years, was unchanged in December. The industry's finance component was also unchanged from November and has shown hardly any growth since July.

Weekly Hours (Establishment Survey Data)

The average workweek of production or nonsupervisory workers on private nonagricultural payrolls fell 0.2 hour in December, after seasonal adjustment, to 34.7 hours. The manufacturing workweek, while slipping a tenth of an hour for the second consecutive month, was still at a very high 41.1 hours. Factory overtime, which held at 3.9 hours, also was quite high by historical standards. (See table B-2.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls edged down by 0.2 percent to 122.0 (1977=100), seasonally adjusted, reflecting the decline in the workweek. The manufacturing index was little changed, at 95.5, but has risen by 3.5 percent over the past year. (See table B-5.)

Hourly and Weekly Earnings (Establishment Survey Data)

Average hourly earnings edged down by 0.2 percent in December, seasonally adjusted, and average weekly earnings fell by 0.8 percent. Prior to seasonal adjustment, hourly earnings dropped by 1 cent to $9.13, while weekly earnings edged up 57 cents to $318.64. (See table B-3.)

The Hourly Earnings Index (Establishment Survey Data)

The Hourly Earnings Index (HEI) was 175.6 (1977=100) in December, seasonally adjusted, a decrease of 0.1 percent from November. For the 12 months ended in December, the index rose 2.7 percent. In dollars of constant purchasing power, the HEI decreased 1.8 percent during the 12-month period ending in November. The HEI excludes the effects of two types of changes unrelated to underlying wage rate movements--fluctuations in manufacturing overtime and interindustry employment shifts. (See table B-4.)

The Employment Situation for January 1988 will be released on Friday, February 5, at 8:30 A.M. (EST).

Revisions of Seasonally Adjusted Household Survey Data

At the end of each calendar year, the BLS routinely revises the seasonally adjusted labor force series derived from the Current Population Survey (household survey) to incorporate the experience of that year. As a result of the recalculation of the seasonal factors, seasonally adjusted data for the most recent 5 years are subject to revision. (Establishment data are similarly revised at about mid-year, concurrently with the introduction of annual benchmark adjustments.)

Revisions were minimal for the aggregate unemployment rates published during 1987. For example, the overall and the civilian worker unemployment rates for February and March each were revised by a tenth, and the overall rate also was revised by a tenth in July. The 1987 annual averages, 6.1 percent for all workers and 6.2 percent for civilian workers, are, of course, not affected by seasonal adjustment revisions. Table B presents revised seasonally adjusted data for major civilian labor force series for December 1986 through December 1987.

The January 1988 issue of Employment and Earnings will contain the new seasonal adjustment factors that will be used to calculate the civilian labor force and other major series for January-June of 1988. The publication will also contain a description of the current seasonal adjustment methodology and revised data for the most recent 13 months or calendar quarters for all regularly published tables containing seasonally adjusted household survey data. Revised monthly data for the 1983-87 revision period for 430 labor force series will be published in the February 1988 issue. Historical seasonally adjusted data (monthly and quarterly) may be purchased from the Bureau. (Contact Gloria P. Green, (202) 523-1959).

HOUSEHOLD DATA

Table B. Employment status of the civilian noninstitutional population by sex and age, seasonally adjusted

(Numbers in thousands)

Employment status, sex, and age	1986	1987											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
TOTAL													
Civilian noninstitutional population[1]	181,547	181,827	181,998	182,179	182,344	182,533	182,703	182,885	183,002	183,161	183,311	183,470	183,620
Civilian labor force	118,576	118,978	119,230	119,246	119,383	119,907	119,608	119,890	120,306	119,963	120,387	120,594	120,722
Percent of population	65.3	65.4	65.5	65.5	65.5	65.7	65.5	65.6	65.7	65.5	65.7	65.7	65.7
Employed	110,657	111,014	111,344	111,455	111,808	112,334	112,300	112,639	113,050	112,872	113,210	113,504	113,744
Employment-population ratio[2]	61.0	61.1	61.2	61.2	61.3	61.5	61.5	61.6	61.8	61.6	61.8	61.9	61.9
Unemployed	7,919	7,964	7,886	7,791	7,557	7,573	7,308	7,251	7,256	7,091	7,177	7,090	6,978
Unemployment rate	6.7	6.7	6.6	6.5	6.3	6.3	6.1	6.0	6.0	5.9	6.0	5.9	5.8
Men, 20 years and over													
Civilian noninstitutional population[1]	78,973	79,132	79,216	79,303	79,387	79,474	79,538	79,625	79,666	79,740	79,807	79,885	80,002
Civilian labor force	61,848	61,911	61,930	61,933	61,970	62,129	62,054	62,106	62,063	62,086	62,211	62,299	62,248
Percent of population	78.3	78.2	78.2	78.1	78.1	78.2	78.0	78.0	77.9	77.9	78.0	78.0	77.8
Employed	58,120	58,220	58,324	58,360	58,516	58,673	58,632	58,783	58,825	58,967	59,037	59,164	59,185
Employment-population ratio[2]	73.6	73.6	73.6	73.6	73.7	73.8	73.7	73.8	73.8	73.9	74.0	74.1	74.0
Agriculture	2,304	2,287	2,317	2,361	2,378	2,383	2,316	2,333	2,289	2,345	2,343	2,297	2,298
Nonagricultural industries	55,816	55,933	56,007	56,019	56,138	56,290	56,316	56,450	56,536	56,622	56,694	56,867	56,887
Unemployed	3,728	3,691	3,606	3,553	3,454	3,456	3,422	3,323	3,258	3,119	3,174	3,135	3,063
Unemployment rate	6.0	6.0	5.8	5.7	5.6	5.6	5.5	5.4	5.2	5.0	5.1	5.0	4.9
Not in labor force	17,125	17,221	17,286	17,370	17,417	17,345	17,482	17,519	17,585	17,655	17,596	17,586	17,754
Women, 20 years and over													
Civilian noninstitutional population[1]	88,016	88,150	88,237	88,321	88,395	88,464	88,546	88,632	88,685	88,785	88,843	88,923	89,010
Civilian labor force	48,947	49,167	49,343	49,414	49,494	49,728	49,722	49,886	49,969	49,922	50,095	50,254	50,361
Percent of population	55.6	55.8	55.9	55.9	56.0	56.2	56.2	56.3	56.3	56.2	56.4	56.5	56.6
Employed	46,121	46,290	46,485	46,582	46,761	47,028	47,088	47,206	47,308	47,251	47,480	47,834	47,750
Employment-population ratio[2]	52.4	52.5	52.7	52.7	52.9	53.2	53.2	53.3	53.3	53.2	53.4	53.6	53.6
Agriculture	609	625	634	602	603	629	619	620	609	600	636	636	643
Nonagricultural industries	45,512	45,665	45,851	45,980	46,158	46,399	46,469	46,586	46,699	46,651	46,844	46,998	47,107
Unemployed	2,826	2,877	2,858	2,832	2,733	2,700	2,634	2,680	2,661	2,671	2,615	2,620	2,611
Unemployment rate	5.8	5.9	5.8	5.7	5.5	5.4	5.3	5.4	5.3	5.4	5.2	5.2	5.2
Not in labor force	39,069	38,983	38,894	38,907	38,901	38,736	38,824	38,746	38,716	38,863	38,748	38,669	38,649
Both sexes, 16 to 19 years													
Civilian noninstitutional population[1]	14,558	14,545	14,546	14,555	14,562	14,595	14,621	14,628	14,649	14,637	14,661	14,663	14,609
Civilian labor force	7,781	7,900	7,957	7,899	7,899	8,050	7,832	7,898	8,254	7,956	8,081	8,041	8,113
Percent of population	53.4	54.3	54.7	54.3	54.2	55.2	53.6	54.0	56.3	54.4	55.1	54.8	55.5
Employed	6,416	6,504	6,535	6,493	6,529	6,633	6,580	6,650	6,917	6,654	6,693	6,706	6,809
Employment-population ratio[2]	44.1	44.7	44.9	44.6	44.8	45.4	45.0	45.5	47.2	45.5	45.7	45.7	46.6
Agriculture	240	262	274	274	269	257	257	259	245	239	270	239	274
Nonagricultural industries	6,176	6,242	6,261	6,219	6,260	6,376	6,323	6,391	6,672	6,415	6,423	6,467	6,535
Unemployed	1,365	1,396	1,422	1,406	1,370	1,417	1,252	1,248	1,337	1,302	1,388	1,335	1,304
Unemployment rate	17.5	17.7	17.9	17.8	17.3	17.6	16.0	15.8	16.2	16.4	17.2	16.6	16.1
Not in labor force	6,777	6,645	6,589	6,656	6,663	6,545	6,789	6,730	6,395	6,681	6,580	6,622	6,496

[1] The population figures are not adjusted for seasonal variation.
[2] Civilian employment as a percent of the civilian noninstitutional population.

NOTE: Data have been revised based on the experience through December 1987.

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Explanatory Note

This news release presents statistics from two major surveys, the Current Population Survey (household survey) and the Current Employment Statistics Survey (establishment survey). The household survey provides the information on the labor force, total employment, and unemployment that appears in the A tables, marked HOUSEHOLD DATA. It is a sample survey of about 59,500 households that is conducted by the Bureau of the Census with most of the findings analyzed and published by the Bureau of Labor Statistics (BLS).

The establishment survey provides the information on the employment, hours, and earnings of workers on nonagricultural payrolls that appears in the B tables, marked ESTABLISHMENT DATA. This information is collected from payroll records by BLS in cooperation with State agencies. The sample includes over 290,000 establishments employing over 38 million people.

For both surveys, the data for a given month are actually collected for and relate to a particular week. In the household survey, unless otherwise indicated, it is the calendar week that contains the 12th day of the month, which is called the survey week. In the establishment survey, the reference week is the pay period including the 12th, which may or may not correspond directly to the calendar week.

The data in this release are affected by a number of technical factors, including definitions, survey differences, seasonal adjustments, and the inevitable variance in results between a survey of a sample and a census of the entire population. Each of these factors is explained below.

Coverage, definitions, and differences between surveys

The sample households in the household survey are selected so as to reflect the entire civilian noninstitutional population 16 years of age and older. Each person in a household is classified as employed, unemployed, or not in the labor force. Those who hold more than one job are classified according to the job at which they worked the most hours.

People are classified as *employed* if they did any work at all as paid civilians; worked in their own business or profession or on their own farm; or worked 15 hours or more in an enterprise operated by a member of their family, whether they were paid or not. People are also counted as employed if they were on unpaid leave because of illness, bad weather, disputes between labor and management, or personal reasons. Members of the Armed Forces stationed in the United States are also included in the employed total.

People are classified as *unemployed,* regardless of their eligibility for unemployment benefits or public assistance, if they meet all of the following criteria: They had no employment during the survey week; they were available for work at that time; and they made specific efforts to find employment sometime during the prior 4 weeks. Persons laid off from their former jobs and awaiting recall and those expecting to report to a job within 30 days need not be looking for work to be counted as unemployed.

The *labor force* equals the sum of the number employed and the number unemployed. The *unemployment rate* is the percentage of unemployed people in the labor force (civilian plus the resident Armed Forces). Table A-5 presents a special grouping of seven measures of unemployment based on varying definitions of unemployment and the labor force. The definitions are provided in the table. The most restrictive definition yields U-1 and the most comprehensive yields U-7. The overall unemployment rate is U-5a, while U-5b represents the same measure with a civilian labor force base.

Unlike the household survey, the establishment survey only counts wage and salary employees whose names appear on the payroll records of nonagricultural firms. As a result, there are many differences between the two surveys, among which are the following:

— The household survey, although based on a smaller sample, reflects a larger segment of the population; the establishment survey excludes agriculture, the self-employed, unpaid family workers, private household workers, and members of the resident Armed Forces;

— The household survey includes people on unpaid leave among the employed; the establishment survey does not;

— The household survey is limited to those 16 years of age and older; the establishment survey is not limited by age;

— The household survey has no duplication of individuals, because each individual is counted only once; in the establishment survey, employees working at more than one job or otherwise appearing on more than one payroll would be counted separately for each appearance.

Other differences between the two surveys are described in "Comparing Employment Estimates from Household and Payroll Surveys," which may be obtained from the BLS upon request.

Seasonal adjustment

Over the course of a year, the size of the Nation's labor force and the levels of employment and unemployment undergo sharp fluctuations due to such seasonal events as changes in weather, reduced or expanded production, harvests, major holidays, and the opening and closing of schools. For example, the labor force increases by a large number each June, when schools close and many young people enter the job market. The effect of such seasonal variation can be very large; over the course of a year, for example, seasonality may account for as much as 95 percent of the month-to-month changes in unemployment.

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Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make nonseasonal developments, such as declines in economic activity or increases in the participation of women in the labor force, easier to spot. To return to the school's-out example, the large number of people entering the labor force each June is likely to obscure any other changes that have taken place since May, making it difficult to determine if the level of economic activity has risen or declined. However, because the effect of students finishing school in previous years is known, the statistics for the current year can be adjusted to allow for a comparable change. Insofar as the seasonal adjustment is made correctly, the adjusted figure provides a more useful tool with which to analyze changes in economic activity.

Measures of labor force, employment, and unemployment contain components such as age and sex. Statistics for all employees, production workers, average weekly hours, and average hourly earnings include components based on the employer's industry. All these statistics can be seasonally adjusted either by adjusting the total or by adjusting each of the components and combining them. The second procedure usually yields more accurate information and is therefore followed by BLS. For example, the seasonally adjusted figure for the labor force is the sum of eight seasonally adjusted civilian employment components, plus the resident Armed Forces total (not adjusted for seasonality), and four seasonally adjusted unemployment components; the total for unemployment is the sum of the four unemployment components; and the overall unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the labor force.

The numerical factors used to make the seasonal adjustments are recalculated regularly. For the household survey, the factors are calculated for the January-June period and again for the July-December period. The January revision is applied to data that have been published over the previous 5 years. For the establishment survey, updated factors for seasonal adjustment are calculated only once a year, along with the introduction of new benchmarks which are discussed at the end of the next section.

Sampling variability

Statistics based on the household and establishment surveys are subject to sampling error, that is, the estimate of the number of people employed and the other estimates drawn from these surveys probably differ from the figures that would be obtained from a complete census, even if the same questionnaires and procedures were used. In the household survey, the amount of the differences can be expressed in terms of standard errors. The numerical value of a standard error depends upon the size of the sample, the results of the survey, and other factors. However, the numerical value is always such that the chances are approximately 68 out of 100 that an estimate based on the sample will differ by no more than the standard error from the results of a complete census. The chances are approximately 90 out of 100 that an estimate based on the sample will differ by no more than 1.6 times the standard error from the results of a complete census. At approximately the 90-percent level of confidence—the confidence limits used by BLS in its analyses—the error for the monthly change in total employment is on the order of plus or minus 328,000; for total unemployment it is 220,000; and, for the overall unemployment rate, it is 0.19 percentage point. These figures do not mean that the sample results are off by these magnitudes but, rather, that the chances are approximately 90 out of 100 that the "true" level or rate would not be expected to differ from the estimates by more than these amounts.

Sampling errors for monthly surveys are reduced when the data are cumulated for several months, such as quarterly or annually. Also, as a general rule, the smaller the estimate, the larger the sampling error. Therefore, relatively speaking, the estimate of the size of the labor force is subject to less error than is the estimate of the number unemployed. And, among the unemployed, the sampling error for the jobless rate of adult men, for example, is much smaller than is the error for the jobless rate of teenagers. Specifically, the error on monthly change in the jobless rate for men is .26 percentage point; for teenagers, it is 1.25 percentage points.

In the establishment survey, estimates for the 2 most current months are based on incomplete returns; for this reason, these estimates are labeled preliminary in the tables. When all the returns in the sample have been received, the estimates are revised. In other words, data for the month of September are published in preliminary form in October and November and in final form in December. To remove errors that build up over time, a comprehensive count of the employed is conducted each year. The results of this survey are used to establish new benchmarks—comprehensive counts of employment—against which month-to-month changes can be measured. The new benchmarks also incorporate changes in the classification of industries and allow for the formation of new establishments.

Additional statistics and other information

In order to provide a broad view of the Nation's employment situation, BLS regularly publishes a wide variety of data in this news release. More comprehensive statistics are contained in *Employment and Earnings*, published each month by BLS. It is available for $8.50 per issue or $22.00 per year from the U.S. Government Printing Office, Washington, D.C., 20204. A check or money order made out to the Superintendent of Documents must accompany all orders.

Employment and Earnings also provides approximations of the standard errors for the household survey data published in this release. For unemployment and other labor force categories, the standard errors appear in tables B through J of its "Explanatory Notes." Measures of the reliability of the data drawn from the establishment survey and the actual amounts of revision due to benchmark adjustments are provided in tables M, O, P, and Q of that publication.

HOUSEHOLD DATA

Table A-1. Employment status of the population, including Armed Forces in the United States, by sex

[Numbers in thousands]

Employment status and sex	Not seasonally adjusted			Seasonally adjusted[1]					
	Dec. 1986	Nov. 1987	Dec. 1987	Dec. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987	Dec. 1987
TOTAL									
Noninstitutional population[2]	183,297	185,225	185,370	183,297	184,738	184,904	185,062	185,225	185,370
Labor force[3]	119,799	122,386	121,956	120,326	122,042	121,706	122,128	122,349	122,472
Participation rate[3]	65.4	66.1	65.8	65.6	66.1	65.8	66.0	66.1	66.1
Total employed[2]	112,338	115,584	115,429	112,407	114,786	114,615	114,951	115,259	115,494
Employment-population ratio[4]	61.3	62.4	62.3	61.3	62.1	62.0	62.1	62.2	62.3
Resident Armed Forces	1,750	1,755	1,750	1,750	1,736	1,743	1,741	1,755	1,750
Civilian employed	110,588	113,809	113,679	110,657	113,050	112,872	113,210	113,504	113,744
Agriculture	2,826	3,020	2,874	3,153	3,143	3,184	3,249	3,172	3,215
Nonagricultural industries	107,762	110,789	110,805	107,504	109,907	109,688	109,961	110,332	110,529
Unemployed	7,461	6,802	6,526	7,919	7,256	7,091	7,177	7,090	6,978
Unemployment rate[5]	6.2	5.6	5.4	6.6	5.9	5.8	5.9	5.8	5.7
Not in labor force	63,498	62,859	63,414	62,971	62,696	63,198	62,924	62,876	62,898
Men, 16 years and over									
Noninstitutional population[2]	87,868	88,849	88,924	87,868	88,598	88,683	88,756	88,849	88,924
Labor force[3]	66,950	67,753	67,565	67,409	67,937	67,776	67,947	68,019	68,030
Participation rate[3]	76.2	76.3	76.0	76.7	76.7	76.4	76.6	76.6	76.5
Total employed[2]	62,568	64,084	63,854	62,960	63,916	63,949	64,048	64,174	64,245
Employment-population ratio[4]	71.2	72.1	71.8	71.7	72.1	72.1	72.2	72.2	72.2
Resident Armed Forces	1,593	1,593	1,589	1,593	1,575	1,581	1,580	1,593	1,589
Civilian employed	60,975	62,491	62,265	61,367	62,341	62,368	62,468	62,581	62,656
Unemployed	4,382	3,669	3,711	4,449	4,021	3,827	3,899	3,845	3,785
Unemployment rate[5]	6.5	5.4	5.5	6.6	5.9	5.6	5.7	5.7	5.6
Women, 16 years and over									
Noninstitutional population[2]	95,429	96,376	96,446	95,429	96,140	96,221	96,295	96,376	96,446
Labor force[3]	52,849	54,613	54,391	52,917	54,106	53,930	54,181	54,330	54,442
Participation rate[3]	55.4	56.7	56.4	55.5	56.3	56.0	56.3	56.4	56.4
Total employed[2]	49,770	51,480	51,575	49,447	50,870	50,666	50,903	51,085	51,249
Employment-population ratio[4]	52.2	53.4	53.5	51.8	52.9	52.7	52.9	53.0	53.1
Resident Armed Forces	157	162	161	157	161	162	161	162	161
Civilian employed	49,613	51,318	51,414	49,290	50,709	50,504	50,742	50,923	51,088
Unemployed	3,079	3,133	2,816	3,470	3,235	3,264	3,278	3,245	3,193
Unemployment rate[5]	5.8	5.7	5.2	6.6	6.0	6.1	6.1	6.0	5.9

[1] The population and Armed Forces figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

[2] Includes members of the Armed Forces stationed in the United States.

[3] Labor force as a percent of the noninstitutional population.

[4] Total employment as a percent of the noninstitutional population.

[5] Unemployment as a percent of the labor force (including the resident Armed Forces).

NOTE: Seasonally adjusted data have been revised based on the experience through December 1987.

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Table A-2. Employment status of the civilian population by sex and age

(Numbers in thousands)

Employment status, sex, and age	Not seasonally adjusted			Seasonally adjusted[1]					
	Dec. 1986	Nov. 1987	Dec. 1987	Dec. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987	Dec. 1987
TOTAL									
Civilian noninstitutional population	181,547	183,470	183,620	181,547	183,002	183,161	183,311	183,470	183,620
Civilian labor force	118,049	120,611	120,206	118,576	120,306	119,963	120,387	120,594	120,722
Participation rate	65.0	65.7	65.5	65.3	65.7	65.5	65.7	65.7	65.7
Employed	110,586	113,809	113,679	110,657	113,050	112,872	113,210	113,504	113,744
Employment-population ratio[2]	60.9	62.0	61.9	61.0	61.8	61.6	61.8	61.9	61.9
Unemployed	7,461	6,802	6,526	7,919	7,256	7,091	7,177	7,090	6,978
Unemployment rate	6.3	5.6	5.4	6.7	6.0	5.9	6.0	5.9	5.8
Men, 20 years and over									
Civilian noninstitutional population	78,973	79,885	80,002	78,973	79,668	79,740	79,807	79,885	80,002
Civilian labor force	61,665	62,268	62,075	61,848	62,083	62,085	62,211	62,299	62,248
Participation rate	78.1	78.0	77.6	78.3	77.9	77.9	78.0	78.0	77.8
Employed	57,959	59,289	59,035	58,120	58,825	58,967	59,037	59,164	59,185
Employment-population ratio[2]	73.4	74.2	73.8	73.6	73.8	73.9	74.0	74.1	74.0
Agriculture	2,128	2,234	2,121	2,304	2,289	2,345	2,343	2,297	2,298
Nonagricultural industries	55,831	57,056	56,914	55,816	56,536	56,622	56,694	56,867	56,887
Unemployed	3,706	2,999	3,040	3,728	3,258	3,118	3,174	3,135	3,063
Unemployment rate	6.0	4.8	4.9	6.0	5.2	5.0	5.1	5.0	4.9
Women, 20 years and over									
Civilian noninstitutional population	88,016	88,923	89,010	88,016	88,685	88,785	88,843	88,923	89,010
Civilian labor force	49,057	50,690	50,492	48,947	49,989	49,922	50,095	50,254	50,361
Participation rate	55.7	57.0	56.7	55.6	56.3	56.2	56.4	56.5	56.6
Employed	46,512	48,166	48,146	46,121	47,308	47,251	47,480	47,634	47,750
Employment-population ratio[2]	52.8	54.2	54.1	52.4	53.3	53.2	53.4	53.6	53.6
Agriculture	545	624	578	609	609	600	636	636	643
Nonagricultural industries	45,966	47,542	47,568	45,512	46,699	46,651	46,844	46,998	47,107
Unemployed	2,546	2,525	2,346	2,826	2,681	2,671	2,615	2,620	2,611
Unemployment rate	5.2	5.0	4.6	5.8	5.3	5.4	5.2	5.2	5.2
Both sexes, 16 to 19 years									
Civilian noninstitutional population	14,558	14,663	14,609	14,558	14,649	14,637	14,661	14,663	14,609
Civilian labor force	7,327	7,633	7,639	7,781	8,254	7,956	8,081	8,041	8,113
Participation rate	50.3	52.1	52.3	53.4	56.3	54.4	55.1	54.8	55.5
Employed	6,117	6,354	6,498	6,416	6,917	6,654	6,693	6,706	6,809
Employment-population ratio[2]	42.0	43.3	44.5	44.1	47.2	45.5	45.7	45.7	46.6
Agriculture	153	162	175	240	245	239	270	239	274
Nonagricultural industries	5,964	6,192	6,323	6,176	6,672	6,415	6,423	6,467	6,535
Unemployed	1,209	1,279	1,141	1,365	1,337	1,302	1,388	1,335	1,304
Unemployment rate	16.5	16.8	14.9	17.5	16.2	16.4	17.2	16.6	16.1

[1] The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

[2] Civilian employment as a percent of the civilian noninstitutional population.

NOTE: Seasonally adjusted data have been revised based on the experience through December 1987.

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Table A-3. Employment status of the civilian population by race, sex, age, and Hispanic origin

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	Not seasonally adjusted			Seasonally adjusted[1]					
	Dec. 1986	Nov. 1987	Dec. 1987	Dec. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987	Dec. 1987
WHITE									
Civilian noninstitutional population	156,111	157,449	157,552	156,111	157,134	157,242	157,342	157,449	157,552
Civilian labor force	101,983	103,729	103,443	102,474	103,516	103,357	103,669	103,731	103,907
Participation rate	65.3	65.9	65.7	65.6	65.9	65.7	65.9	65.9	66.0
Employed	96,386	98,698	98,639	96,544	98,181	98,069	98,317	98,492	98,779
Employment-population ratio[2]	61.7	62.7	62.6	61.8	62.5	62.4	62.5	62.6	62.7
Unemployed	5,596	5,031	4,804	5,930	5,335	5,288	5,352	5,239	5,126
Unemployment rate	5.5	4.9	4.6	5.8	5.2	5.1	5.2	5.1	4.9
Men, 20 years and over									
Civilian labor force	53,970	54,349	54,197	54,157	54,183	54,213	54,375	54,381	54,368
Participation rate	78.5	78.3	78.0	78.8	78.2	78.2	78.4	78.3	78.2
Employed	51,094	52,050	51,873	51,284	51,715	51,803	51,864	51,969	52,046
Employment-population ratio[2]	74.3	75.0	74.6	74.6	74.7	74.7	74.8	74.9	74.9
Unemployed	2,876	2,298	2,323	2,873	2,468	2,410	2,511	2,412	2,322
Unemployment rate	5.3	4.2	4.3	5.3	4.6	4.4	4.6	4.4	4.3
Women, 20 years and over									
Civilian labor force	41,619	42,850	42,659	41,540	42,332	42,308	42,379	42,464	42,569
Participation rate	55.2	56.3	56.0	55.0	55.8	55.7	55.7	55.8	55.9
Employed	39,808	41,058	41,004	39,510	40,449	40,409	40,538	40,606	40,712
Employment-population ratio[2]	52.8	54.0	53.8	52.4	53.3	53.2	53.3	53.4	53.5
Unemployed	1,812	1,792	1,655	2,030	1,883	1,899	1,841	1,858	1,857
Unemployment rate	4.4	4.2	3.9	4.9	4.4	4.5	4.3	4.4	4.4
Both sexes, 16 to 19 years									
Civilian labor force	6,394	6,531	6,587	6,777	7,001	6,836	6,915	6,886	6,970
Participation rate	53.8	54.7	55.3	57.0	58.5	57.2	57.9	57.7	58.6
Employed	5,486	5,590	5,761	5,750	6,017	5,857	5,915	5,917	6,021
Employment-population ratio[2]	46.1	46.8	48.4	48.4	50.3	49.0	49.5	49.6	50.6
Unemployed	908	941	826	1,027	984	979	1,000	969	949
Unemployment rate	14.2	14.4	12.5	15.2	14.1	14.3	14.5	14.1	13.6
Men	16.1	15.1	15.0	15.8	15.2	15.1	15.1	14.8	14.9
Women	12.3	13.7	10.0	14.5	12.9	13.4	13.8	13.3	12.3
BLACK									
Civilian noninstitutional population	20,152	20,482	20,508	20,152	20,396	20,426	20,453	20,482	20,508
Civilian labor force	12,598	13,178	13,127	12,706	13,150	13,028	13,152	13,193	13,215
Participation rate	62.5	64.3	64.0	63.1	64.5	63.8	64.3	64.4	64.4
Employed	10,980	11,632	11,631	10,968	11,513	11,421	11,556	11,589	11,605
Employment-population ratio[2]	54.5	56.8	56.7	54.4	56.4	55.9	56.5	56.6	56.6
Unemployed	1,618	1,545	1,496	1,738	1,637	1,607	1,596	1,604	1,610
Unemployment rate	12.8	11.7	11.4	13.7	12.4	12.3	12.1	12.2	12.2
Men, 20 years and over									
Civilian labor force	5,932	6,053	6,026	5,952	6,054	6,032	6,023	6,045	6,043
Participation rate	74.3	74.6	74.1	74.6	74.9	74.5	74.3	74.5	74.3
Employed	5,249	5,454	5,430	5,250	5,407	5,421	5,431	5,430	5,430
Employment-population ratio[2]	65.8	67.2	66.8	65.8	66.9	67.0	67.0	66.9	66.8
Unemployed	683	599	595	702	647	611	592	615	613
Unemployment rate	11.5	9.9	9.9	11.8	10.7	10.1	9.8	10.2	10.1
Women, 20 years and over									
Civilian labor force	5,908	6,252	6,241	5,905	6,122	6,067	6,177	6,207	6,224
Participation rate	58.9	61.3	61.2	58.9	60.3	59.7	60.7	60.9	61.0
Employed	5,251	5,594	5,626	5,180	5,430	5,357	5,495	5,537	5,544
Employment-population ratio[2]	52.4	54.9	55.1	51.6	53.5	52.7	54.0	54.3	54.3
Unemployed	657	659	615	725	692	710	682	670	680
Unemployment rate	11.1	10.5	9.9	12.3	11.3	11.7	11.0	10.8	10.9
Both sexes, 16 to 19 years									
Civilian labor force	758	872	860	849	974	929	952	941	948
Participation rate	35.4	40.1	39.6	39.6	44.9	42.8	43.6	43.3	43.7
Employed	480	585	575	538	676	643	630	622	631
Employment-population ratio[2]	22.4	26.9	26.5	25.1	31.2	29.6	29.0	28.6	29.1
Unemployed	279	287	285	311	298	286	322	319	317
Unemployment rate	36.8	32.9	33.2	36.6	30.6	30.8	33.8	33.9	33.4
Men	38.3	32.1	35.1	36.2	33.7	31.5	32.5	32.2	33.5
Women	35.2	33.7	31.2	37.1	27.1	30.0	35.2	35.6	33.4

See footnotes at end of table

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Table A-3. Employment status of the civilian population by race, sex, age, and Hispanic origin—Continued

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	Not seasonally adjusted			Seasonally adjusted[1]					
	Dec. 1986	Nov. 1987	Dec. 1987	Dec. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987	Dec. 1987
HISPANIC ORIGIN									
Civilian noninstitutional population	12,540	13,043	13,082	12,540	12,925	12,986	13,003	13,043	13,082
Civilian labor force	8,235	8,786	8,886	8,328	8,549	8,591	8,654	8,763	8,772
Participation rate	65.7	67.4	68.4	66.4	66.1	66.2	66.6	67.2	67.1
Employed	7,406	8,002	8,002	7,460	7,856	7,877	7,935	7,978	8,058
Employment-population ratio[2]	59.1	61.4	61.2	59.5	60.8	60.6	61.0	61.2	61.6
Unemployed	829	785	884	868	693	704	719	785	714
Unemployment rate	10.1	8.9	7.9	10.4	8.1	8.2	8.3	9.0	8.1

[1] The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

[2] Civilian employment as a percent of the civilian noninstitutional population.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented and Hispanics are included in both the white and black population groups. Seasonally adjusted data have been revised based on the experience through December 1987.

Table A-4. Selected employment indicators

(In thousands)

Category	Not seasonally adjusted			Seasonally adjusted					
	Dec. 1986	Nov. 1987	Dec. 1987	Dec. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987	Dec. 1987
CHARACTERISTIC									
Civilian employed, 16 years and over	110,566	113,809	113,679	110,657	113,050	112,872	113,210	113,504	113,744
Married men, spouse present	40,055	40,679	40,707	40,082	40,308	40,404	40,556	40,645	40,711
Married women, spouse present	27,595	28,664	28,614	27,517	28,169	28,069	28,099	28,175	28,249
Women who maintain families	5,965	6,218	6,239	5,958	6,107	6,151	6,178	6,237	6,227
MAJOR INDUSTRY AND CLASS OF WORKER									
Agriculture:									
Wage and salary workers	1,417	1,492	1,403	1,626	1,581	1,624	1,705	1,595	1,599
Self-employed workers	1,292	1,384	1,350	1,387	1,393	1,415	1,430	1,407	1,450
Unpaid family workers	117	144	121	140	155	139	140	155	156
Nonagricultural industries:									
Wage and salary workers	99,430	102,245	102,239	99,197	101,241	101,282	101,522	101,943	101,997
Government	16,586	17,307	17,206	16,458	16,794	16,928	17,033	17,116	17,084
Private industries	82,842	84,938	85,033	82,739	84,447	84,354	84,489	84,825	84,933
Private households	1,167	1,244	1,135	1,225	1,175	1,100	1,222	1,286	1,200
Other industries	81,675	83,694	83,898	81,514	83,272	83,254	83,267	83,539	83,733
Self-employed workers	8,066	8,316	8,317	8,057	8,214	8,204	8,274	8,222	8,280
Unpaid family workers	243	228	249	241	246	297	242	235	246
PERSONS AT WORK PART TIME[1]									
All industries:									
Part time for economic reasons	5,494	5,430	5,166	5,592	5,283	5,281	5,353	5,534	5,282
Slack work	2,506	2,504	2,327	2,459	2,468	2,213	2,377	2,408	2,284
Could only find part-time work	2,758	2,569	2,517	2,895	2,526	2,683	2,655	2,696	2,638
Voluntary part time	14,805	15,639	15,691	13,860	14,573	14,415	14,488	14,523	14,711
Nonagricultural industries:									
Part time for economic reasons	5,226	5,152	4,910	5,324	5,016	4,986	5,087	5,241	5,004
Slack work	2,313	2,293	2,133	2,291	2,265	2,034	2,196	2,209	2,111
Could only find part-time work	2,669	2,510	2,462	2,791	2,463	2,803	2,557	2,587	2,552
Voluntary part time	14,449	15,232	15,238	13,459	14,099	13,987	14,011	14,084	14,227

[1] Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial dispute.

NOTE: Seasonally adjusted data have been revised based on the experience through December 1987.

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Table A-6. Range of unemployment measures based on varying definitions of unemployment and the labor force, seasonally adjusted

(Percent)

Measure	Quarterly averages					Monthly data		
	1986	1987				1987		
	IV	I	II	III	IV	Oct.	Nov.	Dec.
U-1 Persons unemployed 15 weeks or longer as a percent of the civilian labor force	1.9	1.8	1.7	1.6	1.5	1.5	1.5	1.5
U-2 Job losers as a percent of the civilian labor force	3.3	3.2	3.0	2.8	2.7	2.8	2.7	2.7
U-3 Unemployed persons 25 years and over as a percent of the civilian labor force	5.4	5.1	4.8	4.6	4.5	4.6	4.5	4.5
U-4 Unemployed full-time jobseekers as a percent of the full-time civilian labor force	6.5	6.2	5.9	5.6	5.5	5.6	5.5	5.4
U-5a Total unemployed as a percent of the labor force, including the resident Armed Forces	6.8	6.5	6.2	5.9	5.8	5.9	5.8	5.7
U-5b Total unemployed as a percent of the civilian labor force	6.8	6.6	6.3	6.0	5.9	6.0	5.9	5.8
U-6 Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/2 total on part time for economic reasons as a percent of the civilian labor force less 1/2 of the part-time labor force	9.2	9.0	8.5	8.2	8.1	8.2	8.2	8.0
U-7 Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/2 total on part time for economic reasons plus discouraged workers as a percent of the civilian labor force plus discouraged workers less 1/2 of the part-time labor force	10.2	9.9	9.3	9.0	8.8	N.A.	N.A.	N.A.

N.A. = not available.
NOTE: Data have been revised based on the experience through December 1987.

Table A-8. Selected unemployment indicators, seasonally adjusted

Category	Number of unemployed persons (in thousands)			Unemployment rates[1]					
	Dec. 1986	Nov. 1987	Dec. 1987	Dec. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987	Dec. 1987
CHARACTERISTIC									
Total, 16 years and over	7,919	7,090	6,978	6.7	6.0	5.9	6.0	5.9	5.8
Men, 16 years and over	4,449	3,845	3,785	6.8	6.1	5.8	5.9	5.8	5.7
Men, 20 years and over	3,728	3,135	3,063	6.0	5.2	5.0	5.1	5.0	4.9
Women, 16 years and over	3,470	3,245	3,193	6.6	6.0	6.1	6.1	6.0	5.9
Women, 20 years and over	2,826	2,620	2,611	5.8	5.3	5.4	5.2	5.2	5.2
Both sexes, 16 to 19 years	1,365	1,335	1,304	17.5	16.2	16.4	17.2	16.6	16.1
Married men, spouse present	1,817	1,487	1,441	4.3	3.7	3.7	3.7	3.5	3.4
Married women, spouse present	1,353	1,247	1,275	4.7	4.3	4.2	4.2	4.2	4.3
Women who maintain families	662	579	568	10.0	9.0	8.8	8.9	8.5	8.4
Full-time workers	6,481	5,684	5,601	6.4	5.6	5.5	5.6	5.5	5.4
Part-time workers	1,459	1,415	1,396	8.8	8.2	8.4	8.3	8.2	8.0
Labor force time lost[2]	—	—	—	7.6	6.9	6.8	6.8	6.8	6.6
INDUSTRY									
Nonagricultural private wage and salary workers	5,981	5,243	5,096	6.7	6.0	5.9	5.9	5.8	5.7
Mining	130	62	71	13.9	8.6	7.4	8.3	7.0	8.0
Construction	818	664	663	13.5	11.3	11.9	11.2	10.6	10.6
Manufacturing	1,504	1,150	1,106	6.9	5.8	5.6	5.7	5.3	5.1
Durable goods	849	616	606	6.5	5.5	5.4	5.2	4.8	4.8
Nondurable goods	655	534	500	7.6	5.8	5.9	6.5	5.9	5.6
Transportation and public utilities	286	277	289	4.6	4.4	4.1	4.4	4.5	4.6
Wholesale and retail trade	1,658	1,545	1,423	7.3	7.0	6.4	6.5	6.8	6.2
Finance and service industries	1,585	1,545	1,544	5.1	4.7	4.8	4.7	4.8	4.8
Government workers	596	611	565	3.5	3.7	3.4	3.3	3.4	3.2
Agricultural wage and salary workers	211	200	196	11.5	10.6	8.6	10.6	11.1	10.9

[1] Unemployment as a percent of the civilian labor force.
[2] Aggregate hours lost by the unemployed and persons on part time for economic reasons as a percent of potentially available labor force hours.
NOTE: Data have been revised based on the experience through December 1987.

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Table A-7. Duration of unemployment

(Numbers in thousands)

Weeks of unemployment	Not seasonally adjusted			Seasonally adjusted					
	Dec. 1986	Nov. 1987	Dec. 1987	Dec. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987	Dec. 1987
DURATION									
Less than 5 weeks	2,872	3,131	2,871	3,296	3,309	3,230	3,233	3,219	3,239
5 to 14 weeks	2,443	2,099	1,981	2,403	2,142	1,948	2,060	2,089	1,998
15 weeks and over	2,046	1,893	1,986	2,194	1,999	1,904	1,801	1,854	1,791
15 to 26 weeks	964	770	813	1,042	834	917	844	899	882
27 weeks and over	1,082	969	961	1,152	1,092	987	957	955	909
Average (mean) duration, in weeks	15.4	14.0	14.8	15.0	14.3	14.2	14.1	14.0	14.2
Median duration, in weeks	7.9	6.9	6.3	7.1	6.4	6.6	6.2	6.1	6.0
PERCENT DISTRIBUTION									
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	36.8	46.0	44.0	42.0	44.2	46.5	46.3	46.4	46.2
5 to 14 weeks	32.7	30.0	30.5	30.3	28.6	27.6	29.4	28.7	28.2
15 weeks and over	27.4	24.0	25.5	27.7	26.2	26.9	25.3	25.9	25.6
15 to 26 weeks	12.9	11.3	12.5	13.1	11.5	13.0	11.9	12.7	12.6
27 weeks and over	14.6	12.7	13.0	14.6	14.7	14.0	13.4	13.2	12.9

NOTE: Seasonally adjusted data have been revised based on the experience through December 1987.

Table A-8. Reason for unemployment

(Numbers in thousands)

Reasons	Not seasonally adjusted			Seasonally adjusted					
	Dec. 1986	Nov. 1987	Dec. 1987	Dec. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987	Dec. 1987
NUMBER OF UNEMPLOYED									
Job losers	3,936	3,171	3,208	3,813	3,389	3,313	3,366	3,307	3,300
On layoff	1,126	885	908	1,064	874	820	944	878	886
Other job losers	2,810	2,346	2,297	2,849	2,515	2,466	2,444	2,429	2,344
Job leavers	929	960	988	1,034	992	981	980	988	948
Reentrants	1,796	1,929	1,736	2,005	1,999	1,909	1,845	1,974	1,945
New entrants	801	752	727	980	966	992	914	956	909
PERCENT DISTRIBUTION									
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	52.8	48.6	49.1	48.3	47.0	46.6	47.7	46.9	46.7
On layoff	15.1	12.1	13.9	13.4	12.1	11.6	13.3	12.4	12.2
Other job losers	37.7	34.5	35.2	35.9	34.9	35.2	34.4	34.4	33.5
Job leavers	12.5	14.0	13.1	12.9	13.8	13.8	13.5	13.1	13.5
Reentrants	24.1	28.4	26.6	25.3	27.3	26.9	26.0	26.0	27.8
New entrants	10.7	11.1	11.1	12.5	11.9	12.5	12.9	12.1	13.0
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE									
Job losers	3.4	2.8	2.7	3.3	2.8	2.8	2.8	2.7	2.7
Job leavers	.8	.8	.7	.9	.8	.8	.8	.8	.8
Reentrants	1.5	1.6	1.4	1.7	1.6	1.6	1.5	1.6	1.6
New entrants	.7	.6	.6	.8	.7	.7	.8	.7	.8

NOTE: Seasonally adjusted data have been revised based on the experience through December 1987.

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Table A-9. Unemployed persons by sex and age, seasonally adjusted

Sex and age	Number of unemployed persons (in thousands)			Unemployment rates[1]					
	Dec. 1986	Nov. 1987	Dec. 1987	Dec. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987	Dec. 1987
Total, 16 years and over	7,919	7,090	6,978	6.7	6.0	5.9	6.0	5.9	5.8
16 to 24 years	3,001	2,641	2,547	13.0	11.8	11.8	11.8	11.6	11.2
16 to 19 years	1,365	1,335	1,304	17.5	16.2	16.4	17.2	16.6	16.1
16 to 17 years	634	649	613	19.1	18.3	18.3	20.4	19.2	17.8
18 to 19 years	731	691	686	16.3	14.7	15.2	14.7	14.8	14.7
20 to 24 years	1,636	1,306	1,243	10.7	9.4	9.4	8.8	8.9	8.5
25 years and over	4,913	4,442	4,412	5.1	4.7	4.6	4.6	4.5	4.5
25 to 54 years	4,393	3,909	3,939	5.4	4.9	4.8	4.8	4.7	4.8
55 years and over	523	513	486	3.5	3.2	3.3	3.1	3.4	3.2
Men, 16 years and over	4,449	3,845	3,785	6.8	6.1	5.8	5.9	5.8	5.7
16 to 24 years	1,823	1,414	1,378	13.5	12.5	12.1	12.1	12.0	11.7
16 to 19 years	721	710	722	18.2	17.8	17.3	17.4	17.2	17.2
16 to 17 years	319	356	347	19.0	20.5	19.7	20.9	20.4	19.3
18 to 19 years	398	355	367	17.2	15.9	15.9	14.8	14.8	15.3
20 to 24 years	902	704	656	11.2	9.8	9.3	9.2	9.2	8.7
25 years and over	2,810	2,419	2,390	5.2	4.7	4.5	4.5	4.4	4.4
25 to 54 years	2,462	2,109	2,112	5.5	4.9	4.7	4.8	4.6	4.6
55 years and over	347	313	282	3.9	3.4	3.2	3.1	3.5	3.2
Women, 16 years and over	3,470	3,245	3,193	6.6	6.0	6.1	6.1	6.0	5.9
16 to 24 years	1,378	1,227	1,169	12.5	11.0	11.5	11.5	11.2	10.7
16 to 19 years	644	625	582	16.9	14.4	15.4	16.9	16.0	14.8
16 to 17 years	315	293	266	19.1	16.0	16.9	19.9	17.9	16.2
18 to 19 years	333	336	321	15.3	13.4	14.4	14.6	14.7	14.1
20 to 24 years	734	602	587	10.2	9.0	9.4	8.5	8.6	8.4
25 years and over	2,103	2,023	2,022	5.0	4.7	4.7	4.7	4.7	4.7
25 to 54 years	1,931	1,800	1,827	5.4	5.0	4.9	4.9	4.9	4.9
55 years and over	176	200	206	2.9	2.9	3.5	3.1	3.2	3.3

[1] Unemployment as a percent of the civilian labor force.

NOTE: Data have been revised based on the experience through December 1987.

Table A-10. Employment status of black and other workers

(Numbers in thousands)

Employment status	Not seasonally adjusted			Seasonally adjusted[1]					
	Dec. 1986	Nov. 1987	Dec. 1987	Dec. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987	Dec. 1987
Civilian noninstitutional population	25,436	26,021	26,068	25,436	25,868	25,919	25,969	26,021	26,068
Civilian labor force	16,065	16,882	16,763	16,163	16,697	16,594	16,755	16,869	16,853
Participation rate	63.2	64.9	64.3	63.5	64.5	64.0	64.5	64.8	64.7
Employed	14,200	15,112	15,040	14,174	14,804	14,778	14,946	15,017	15,008
Employment-population ratio[2]	55.8	58.1	57.7	55.7	57.2	57.0	57.6	57.7	57.6
Unemployed	1,865	1,771	1,723	1,989	1,893	1,816	1,809	1,852	1,845
Unemployment rate	11.6	10.5	10.3	12.3	11.3	10.9	10.8	11.0	10.9
Not in labor force	9,371	9,139	9,305	9,273	9,171	9,325	9,214	9,152	9,215

[1] The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

[2] Civilian employment as a percent of the civilian noninstitutional population.

NOTE: Seasonally adjusted data have been revised based on the experience through December 1987.

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Table A-11. Occupational status of the employed and unemployed, not seasonally adjusted

(Numbers in thousands)

Occupation	Civilian employed		Unemployed		Unemployment rate	
	Dec. 1986	Dec. 1987	Dec. 1986	Dec. 1987	Dec. 1986	Dec. 1987
Total, 16 years and over[1]	110,588	113,679	7,461	6,526	6.3	5.4
Managerial and professional specialty	27,325	28,519	584	605	2.1	2.1
Executive, administrative, and managerial	12,869	13,546	287	342	2.2	2.5
Professional specialty	14,457	14,972	297	263	2.0	1.7
Technical, sales, and administrative support	35,018	35,929	1,421	1,329	3.9	3.6
Technicians and related support	3,330	3,393	107	93	3.1	2.7
Sales occupations	13,853	13,932	586	564	4.1	3.9
Administrative support, including clerical	17,833	18,605	728	671	3.9	3.5
Service occupations	14,886	15,250	1,302	1,146	8.0	7.0
Private household	990	921	68	60	6.5	6.1
Protective service	1,872	1,947	116	76	5.8	3.7
Service, except private household and protective	12,024	12,383	1,117	1,011	8.5	7.5
Precision production, craft, and repair	13,449	13,431	963	736	6.7	5.2
Mechanics and repairers	4,282	4,347	236	172	5.2	3.8
Construction trades	4,925	5,035	482	406	8.9	7.5
Other precision production, craft, and repair	4,242	4,050	246	160	5.5	3.8
Operators, fabricators, and laborers	17,020	17,554	2,063	1,667	10.8	8.7
Machine operators, assemblers, and inspectors	7,689	8,023	876	663	10.2	7.9
Transportation and material moving occupations	4,652	4,671	446	380	8.8	7.5
Handlers, equipment cleaners, helpers, and laborers	4,679	4,861	741	604	13.7	11.0
Construction laborers	658	785	208	193	24.1	19.7
Other handlers, equipment cleaners, helpers, and laborers	4,021	4,076	533	411	11.7	9.2
Farming, forestry, and fishing	2,892	2,996	266	266	9.1	8.7

[1] Persons with no previous work experience and those whose last job was in the Armed Forces are included in the unemployed total.

Table A-12. Employment status of male Vietnam-era veterans and nonveterans by age, not seasonally adjusted

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
			Total		Employed		Unemployed			
							Number		Percent of labor force	
	Dec. 1986	Dec. 1987	Dec. 1986	Dec. 1987	Dec. 1986	Dec. 1987	Dec. 1986	Dec. 1987	Dec. 1986	Dec. 1987
VIETNAM-ERA VETERANS										
Total, 30 years and over	7,792	7,863	7,256	7,242	6,901	6,902	355	340	4.9	4.7
30 to 44 years	6,314	6,083	6,043	5,786	5,721	5,481	322	305	5.3	5.3
30 to 34 years	1,045	813	990	766	911	687	79	79	8.0	10.3
35 to 39 years	2,857	2,402	2,748	2,304	2,602	2,185	144	119	5.2	5.2
40 to 44 years	2,412	2,868	2,307	2,716	2,208	2,609	99	107	4.3	3.9
45 years and over	1,478	1,780	1,213	1,456	1,180	1,421	33	35	2.7	2.4
NONVETERANS										
Total, 30 to 44 years	18,886	19,908	17,841	18,727	16,901	17,943	940	784	5.3	4.2
30 to 34 years	8,853	8,974	8,220	8,487	7,759	8,091	461	396	5.6	4.7
35 to 39 years	5,946	6,501	5,609	6,113	5,307	5,886	302	227	5.4	3.7
40 to 44 years	4,287	4,433	4,012	4,127	3,835	3,966	177	161	4.4	3.9

NOTE: Male Vietnam-era veterans are men who served in the Armed Forces between August 5, 1964 and May 7, 1975. Nonveterans are men who have never served in the Armed Forces; published data are limited to those 30 to 44 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population.

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Table A-13. Employment status of the civilian population for eleven large States

(Numbers in thousands)

State and employment status	Not seasonally adjusted[1]			Seasonally adjusted[2]					
	Dec. 1986	Nov. 1987	Dec. 1987	Dec. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987	Dec. 1987
California									
Civilian noninstitutional population	20,314	20,731	20,766	20,314	20,624	20,660	20,695	20,731	20,766
Civilian labor force	13,389	13,916	13,872	13,476	13,775	13,823	13,801	13,928	13,976
Employed	12,546	13,201	13,194	12,569	13,036	13,026	12,979	13,191	13,247
Unemployed	843	717	678	907	739	797	822	737	729
Unemployment rate	6.3	5.1	4.9	6.7	5.4	5.8	6.0	5.3	5.2
Florida									
Civilian noninstitutional population	9,285	9,521	9,541	9,285	9,480	9,480	9,500	9,521	9,541
Civilian labor force	5,722	5,929	5,998	5,726	5,851	5,868	5,961	5,946	5,998
Employed	5,458	5,626	5,701	5,449	5,519	5,574	5,679	5,637	5,686
Unemployed	264	303	297	277	332	294	282	309	312
Unemployment rate	4.6	5.1	5.0	4.8	5.7	5.0	4.7	5.2	5.2
Illinois									
Civilian noninstitutional population	8,667	8,690	8,691	8,667	8,686	8,687	8,688	8,690	8,691
Civilian labor force	5,614	5,703	5,670	5,643	5,819	5,804	5,828	5,713	5,701
Employed	5,223	5,343	5,278	5,223	5,409	5,434	5,446	5,322	5,272
Unemployed	391	361	393	420	410	370	382	391	429
Unemployment rate	7.0	6.3	6.9	7.4	7.0	6.4	6.6	6.8	7.5
Massachusetts									
Civilian noninstitutional population	4,559	4,576	4,577	4,559	4,573	4,574	4,575	4,576	4,577
Civilian labor force	3,056	3,085	3,075	3,052	3,097	3,051	3,107	3,079	3,074
Employed	2,960	3,013	2,993	2,950	3,005	2,975	3,007	2,997	2,984
Unemployed	95	72	81	102	92	76	100	82	90
Unemployment rate	3.1	2.3	2.6	3.3	3.0	2.5	3.2	2.7	2.9
Michigan									
Civilian noninstitutional population	6,888	6,949	6,953	6,888	6,934	6,939	6,944	6,949	6,953
Civilian labor force	4,477	4,533	4,485	4,497	4,636	4,606	4,532	4,527	4,496
Employed	4,136	4,199	4,114	4,135	4,231	4,246	4,205	4,177	4,101
Unemployed	341	335	372	362	407	360	327	350	397
Unemployment rate	7.6	7.4	8.3	8.0	8.8	7.8	7.2	7.7	8.8
New Jersey									
Civilian noninstitutional population	5,948	6,003	6,007	5,948	5,990	5,994	5,999	6,003	6,007
Civilian labor force	3,852	3,962	3,945	3,900	3,986	3,916	3,965	3,965	3,996
Employed	3,700	3,834	3,804	3,727	3,815	3,740	3,812	3,843	3,839
Unemployed	151	129	141	173	171	176	153	142	157
Unemployment rate	3.9	3.2	3.6	4.4	4.3	4.5	3.9	3.6	3.9
New York									
Civilian noninstitutional population	13,747	13,788	13,790	13,747	13,781	13,784	13,786	13,786	13,790
Civilian labor force	8,454	8,590	8,539	8,423	8,526	8,392	8,480	8,584	8,521
Employed	7,994	8,167	8,184	7,921	8,145	8,012	8,057	8,134	8,135
Unemployed	460	423	355	502	381	380	423	450	386
Unemployment rate	5.4	4.9	4.2	6.0	4.5	4.5	5.0	5.2	4.5
North Carolina									
Civilian noninstitutional population	4,792	4,867	4,873	4,792	4,848	4,854	4,861	4,867	4,873
Civilian labor force	3,219	3,336	3,298	3,221	3,306	3,313	3,350	3,336	3,303
Employed	3,063	3,202	3,161	3,048	3,165	3,182	3,218	3,205	3,151
Unemployed	155	134	137	173	141	131	132	131	152
Unemployment rate	4.8	4.0	4.2	5.4	4.3	4.0	3.9	3.9	4.6
Ohio									
Civilian noninstitutional population	8,115	8,140	8,141	8,115	8,136	8,137	8,138	8,140	8,141
Civilian labor force	5,259	5,263	5,235	5,276	5,205	5,148	5,176	5,251	5,249
Employed	4,841	4,959	4,915	4,861	4,841	4,865	4,878	4,942	4,927
Unemployed	418	303	321	415	364	283	300	309	322
Unemployment rate	7.9	5.8	6.1	7.9	7.0	5.5	5.8	5.9	6.1

See footnotes at end of table

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Table A-13. Employment status of the civilian population for eleven large States—Continued

(Numbers in thousands)

State and employment status	Not seasonally adjusted[1]			Seasonally adjusted[2]					
	Dec. 1986	Nov. 1987	Dec. 1987	Dec. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987	Dec. 1987
Pennsylvania									
Civilian noninstitutional population	9,254	9,291	9,293	9,254	9,283	9,286	9,288	9,291	9,293
Civilian labor force	5,479	5,716	5,744	5,528	5,697	5,675	5,738	5,687	5,793
Employed	5,220	5,417	5,451	5,229	5,383	5,359	5,400	5,372	5,463
Unemployed	258	299	293	299	314	316	338	315	330
Unemployment rate	4.7	5.2	5.1	5.4	5.5	5.6	5.9	5.5	5.7
Texas									
Civilian noninstitutional population	12,089	12,300	12,318	12,089	12,246	12,264	12,282	12,300	12,318
Civilian labor force	8,318	8,569	8,455	8,354	8,548	8,401	8,390	8,573	8,470
Employed	7,593	7,895	7,861	7,550	7,828	7,685	7,737	7,848	7,831
Unemployed	724	674	574	804	716	716	653	725	639
Unemployment rate	8.7	7.9	6.8	9.6	8.4	8.5	7.8	8.5	7.5

[1] These are the official Bureau of Labor Statistics' estimates used in the administration of Federal fund allocation programs.

[2] The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and the seasonally adjusted columns.

NOTE: Revised seasonal factors are not yet available for State data. The seasonally adjusted series will be revised for the release of January data on February 5.

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HOUSEHOLD DATA

Table A-14. Persons not in the labor force by reason, sex, and race, quarterly averages

(In thousands)

Reason, sex, and race	Not seasonally adjusted		Seasonally adjusted				
	1986	1987	1986	1987			
	IV	IV	IV	I	II	III	IV
TOTAL							
Total not in labor force	62,908	62,947	62,808	62,851	62,901	62,963	62,899
Do not want a job now	57,219	57,614	57,026	56,983	57,008	57,490	57,408
Current activity: Going to school	8,075	8,184	6,333	6,394	6,403	6,388	6,414
Ill, disabled	3,773	4,248	3,957	4,111	4,193	4,426	4,467
Keeping house	25,907	25,391	26,024	26,182	25,550	25,646	25,513
Retired	15,781	16,224	16,055	15,872	16,250	16,317	16,508
Other activity	3,683	3,567	4,657	4,424	4,611	4,713	4,507
Want a job now	5,690	5,333	5,861	5,780	5,871	5,802	5,462
Reason not looking: School attendance	1,378	1,343	1,425	1,348	1,470	1,556	1,389
Ill health, disability	817	901	763	848	914	847	834
Home responsibilities	1,277	1,170	1,356	1,231	1,325	1,274	1,234
Think cannot get a job	1,120	891	1,147	1,135	1,048	992	910
Job-market factors[1]	794	566	824	762	694	635	581
Personal factors[2]	326	325	323	373	354	357	329
Other reasons[3]	1,097	1,028	1,170	1,218	1,114	1,132	1,094
Men							
Total not in labor force	20,773	21,130	20,455	20,486	20,681	20,811	20,845
Do not want a job now	18,807	19,229	18,444	18,459	18,585	18,945	18,878
Want a job now	1,965	1,902	2,008	1,994	2,062	2,064	1,918
Reason not looking: School attendance	647	707	676	661	750	773	737
Ill health, disability	396	458	360	408	463	416	414
Think cannot get a job	483	358	493	469	428	431	358
Other reasons[3]	440	378	479	456	421	444	409
Women							
Total not in labor force	42,136	41,817	42,354	42,365	42,220	42,152	42,055
Do not want a job now	38,411	38,385	38,582	38,524	38,423	38,545	38,530
Want a job now	3,724	3,432	3,853	3,786	3,809	3,738	3,545
Reason not looking: School attendance	731	636	749	687	720	784	653
Ill health, disability	421	443	403	440	451	431	421
Home responsibilities	1,277	1,170	1,356	1,231	1,325	1,274	1,234
Think cannot get a job	637	533	654	666	619	561	552
Other reasons	658	650	691	762	693	688	685
White							
Total not in labor force	53,666	53,746	53,557	53,658	53,627	53,771	53,679
Do not want a job now	49,575	49,811	49,336	49,437	49,284	49,536	49,564
Want a job now	4,094	3,935	4,238	4,198	4,344	4,252	4,045
Reason not looking: School attendance	937	949	972	951	1,093	1,062	986
Ill health, disability	583	701	541	617	683	648	646
Home responsibilities	940	864	992	912	959	948	909
Think cannot get a job	772	598	806	771	714	643	620
Other reasons[3]	862	823	927	946	896	951	884
Black							
Total not in labor force	7,449	7,326	7,401	7,367	7,457	7,326	7,294
Do not want a job now	6,057	6,079	6,034	5,962	6,169	6,088	6,083
Want a job now	1,393	1,227	1,389	1,402	1,294	1,237	1,210
Reason not looking: School attendance	380	348	374	346	315	333	341
Ill health, disability	209	183	190	225	193	168	165
Home responsibilities	261	278	308	291	313	275	304
Think cannot get a job	302	246	292	327	298	315	237
Other reasons[3]	221	172	225	212	175	145	163

[1] Job-market factors include "could not find job" and "thinks no job available."

[2] Personal factors include "employers think too young or old," "lacks education or training," and "other personal handicap."

[3] Includes small number of men not looking for work because of "home responsibilities."

NOTE: Seasonally adjusted data have been revised based on the experience through December 1987.

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ESTABLISHMENT DATA

Table B-1. Employees on nonagricultural payrolls by industry

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted					
	Dec. 1986	Oct. 1987	Nov. 1987 p	Dec. 1987 p	Dec. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987 p	Dec. 1987 p
Total	101,289	103,787	104,093	104,333	100,567	102,275	102,434	102,983	103,246	103,572
Total private	84,103	86,392	86,541	86,788	83,643	85,229	85,386	85,795	86,038	86,294
Goods-producing	24,963	25,442	25,377	25,206	24,630	24,886	24,917	25,066	25,173	25,270
Mining	728	766	766	767	724	751	759	764	760	762
Oil and gas extraction	414.8	443.0	444.7	449.6	406	434	439	443	440	440
Construction	4,861	5,321	5,209	5,055	4,936	5,006	4,989	5,053	5,077	5,132
General building contractors	1,271.9	1,334.9	1,316.8	1,286.9	1,277	1,262	1,260	1,279	1,283	1,292
Manufacturing	18,974	19,355	19,402	19,384	18,970	19,129	19,169	19,247	19,336	19,376
Production workers	12,908	13,232	13,268	13,257	12,906	13,038	13,072	13,129	13,205	13,251
Durable goods	11,185	11,361	11,398	11,403	11,175	11,248	11,268	11,319	11,364	11,390
Production workers	7,402	7,570	7,605	7,612	7,393	7,475	7,494	7,530	7,573	7,602
Lumber and wood products	716.3	753.9	749.7	741.2	728	736	740	741	750	753
Furniture and fixtures	503.6	528.0	531.4	532.6	499	518	520	524	526	527
Stone, clay, and glass products	577.0	591.9	592.1	582.8	584	582	581	583	588	590
Primary metal industries	729.3	762.1	764.8	767.1	733	754	764	768	770	770
Blast furnaces and basic steel products	257.8	281.1	281.6	283.4	259	278	283	286	286	285
Fabricated metal products	1,426.3	1,447.1	1,453.3	1,454.6	1,422	1,425	1,429	1,438	1,446	1,450
Machinery, except electrical	2,014.8	2,059.9	2,068.2	2,084.6	2,011	2,044	2,053	2,064	2,070	2,080
Electrical and electronic equipment	2,121.9	2,115.6	2,122.2	2,132.6	2,118	2,095	2,096	2,111	2,118	2,128
Transportation equipment	2,034.0	2,021.1	2,030.0	2,031.8	2,018	2,028	2,018	2,019	2,018	2,016
Motor vehicles and equipment	866.0	840.2	843.0	846.0	853	848	837	838	836	833
Instruments and related products	698.9	696.2	701.4	700.6	698	695	695	697	701	700
Miscellaneous manufacturing	362.9	383.0	384.5	374.6	364	371	372	374	377	376
Nondurable goods	7,789	7,994	8,004	7,981	7,795	7,881	7,901	7,928	7,972	7,986
Production workers	5,506	5,662	5,663	5,645	5,513	5,563	5,578	5,599	5,632	5,649
Food and kindred products	1,621.4	1,679.6	1,659.1	1,633.1	1,631	1,632	1,631	1,635	1,644	1,641
Tobacco manufactures	60.3	59.0	57.9	58.0	58	56	55	55	56	56
Textile mill products	716.4	739.6	741.3	740.3	715	732	735	736	738	740
Apparel and other textile products	1,108.1	1,133.1	1,134.0	1,125.0	1,110	1,110	1,117	1,123	1,128	1,126
Paper and allied products	679.7	679.5	682.5	684.3	679	677	681	678	682	684
Printing and publishing	1,481.6	1,513.5	1,527.8	1,533.5	1,474	1,508	1,509	1,514	1,522	1,526
Chemicals and allied products	1,014.5	1,034.2	1,039.6	1,043.4	1,017	1,031	1,031	1,035	1,042	1,047
Petroleum and coal products	160.5	166.6	165.7	164.6	163	164	166	167	166	167
Rubber and miscellaneous plastics products	798.3	834.4	840.5	843.8	800	819	824	833	841	845
Leather and leather products	148.6	154.6	155.4	155.3	148	152	152	152	153	154
Service-producing	76,726	78,345	78,716	79,127	75,937	77,389	77,517	77,919	78,073	78,302
Transportation and public utilities	5,320	5,485	5,490	5,495	5,286	5,377	5,416	5,436	5,460	5,458
Transportation	3,114	3,249	3,247	3,253	3,078	3,147	3,183	3,198	3,215	3,214
Communication and public utilities	2,206	2,236	2,243	2,242	2,208	2,230	2,233	2,238	2,245	2,244
Wholesale trade	5,733	5,862	5,868	5,878	5,725	5,807	5,815	5,831	5,851	5,871
Durable goods	3,384	3,451	3,461	3,475	3,383	3,422	3,431	3,444	3,458	3,475
Nondurable goods	2,349	2,411	2,407	2,403	2,342	2,385	2,384	2,387	2,393	2,396
Retail trade	18,612	18,463	18,700	19,046	18,007	18,256	18,314	18,408	18,424	18,420
General merchandise stores	2,658.1	2,478.8	2,589.9	2,725.4	2,363	2,411	2,415	2,459	2,437	2,425
Food stores	2,977.4	2,980.5	3,015.7	3,052.5	2,916	2,962	2,958	2,969	2,980	2,990
Automotive dealers and service stations	1,959.7	2,002.1	1,997.7	2,002.3	1,970	1,985	1,988	2,000	2,002	2,012
Eating and drinking places	5,884.4	6,038.2	5,992.5	6,008.7	5,938	5,992	6,018	6,032	6,047	6,063
Finance, insurance, and real estate	6,437	6,636	6,634	6,646	6,451	6,624	6,629	6,650	6,658	6,660
Finance	3,224	3,286	3,292	3,297	3,227	3,293	3,292	3,296	3,302	3,300
Insurance	1,996	2,064	2,067	2,076	1,999	2,050	2,054	2,068	2,069	2,078
Real estate	1,217	1,286	1,275	1,273	1,225	1,281	1,283	1,286	1,287	1,282
Services	23,438	24,504	24,672	24,517	23,544	24,279	24,295	24,406	24,472	24,615
Business services	4,938.6	5,245.7	5,233.9	5,252.9	4,912	5,133	5,152	5,196	5,192	5,227
Health services	6,677.3	6,986.5	7,018.3	7,051.4	6,691	6,923	6,943	6,987	7,025	7,066
Government	17,186	17,395	17,552	17,545	16,924	17,046	17,048	17,188	17,208	17,278
Federal	2,895	2,944	2,954	2,970	2,904	2,940	2,941	2,965	2,975	2,979
State	4,004	4,068	4,098	4,089	3,927	3,964	3,967	3,973	3,979	4,009
Local	10,287	10,383	10,500	10,486	10,093	10,142	10,140	10,250	10,254	10,290

p = preliminary

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Table B-2. Average weekly hours of production or nonsupervisory workers[1] on private nonagricultural payrolls by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	Dec. 1986	Oct. 1987	Nov. 1987 p	Dec. 1987 p	Dec. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987 p	Dec. 1987 p
Total private	34.8	34.9	34.8	34.9	34.6	34.9	34.6	34.9	34.9	34.7
Mining	42.4	42.7	42.5	42.8	(2)	(2)	(2)	(2)	(2)	(2)
Construction	36.8	38.8	37.1	37.8	(2)	(2)	(2)	(2)	(2)	(2)
Manufacturing	41.5	41.3	41.4	41.9	40.8	41.0	40.6	41.3	41.2	41.1
Overtime hours	3.8	4.0	4.1	4.2	3.6	3.8	3.6	4.0	3.9	3.9
Durable goods	42.3	41.8	42.0	42.5	41.4	41.6	41.0	41.9	41.8	41.6
Overtime hours	4.0	4.2	4.2	4.4	3.6	4.0	3.7	4.1	4.0	4.0
Lumber and wood products	40.6	40.6	40.4	40.7	40.6	40.4	39.4	40.4	40.8	40.7
Furniture and fixtures	41.1	40.6	40.4	40.9	39.9	40.1	39.3	40.0	40.0	39.7
Stone, clay, and glass products	42.0	43.0	42.3	42.3	42.2	42.1	41.9	42.6	42.4	42.6
Primary metal industries	43.0	43.4	43.7	44.1	42.5	43.5	43.4	43.7	43.6	43.5
Blast furnaces and basic steel products	42.9	43.7	43.7	44.4	42.6	44.0	45.2	44.3	43.8	44.1
Fabricated metal products	42.2	42.0	42.2	42.7	41.2	41.5	40.8	42.0	42.0	41.7
Machinery, except electrical	42.8	42.4	42.9	43.6	41.7	42.2	41.6	42.6	42.7	42.5
Electrical and electronic equipment	42.1	41.1	41.4	42.1	41.0	41.0	40.4	41.1	41.0	41.0
Transportation equipment	43.4	42.3	42.6	42.8	42.1	41.9	41.3	42.5	42.4	41.5
Motor vehicles and equipment	43.9	42.7	43.0	42.9	42.4	41.9	41.1	43.0	43.1	41.4
Instruments and related products	42.2	41.8	42.1	43.4	41.1	41.7	41.1	42.1	41.8	42.3
Miscellaneous manufacturing	40.2	40.0	39.6	40.1	(2)	(2)	(2)	(2)	(2)	(2)
Nondurable goods	40.6	40.5	40.6	41.0	40.0	40.3	40.1	40.5	40.4	40.4
Overtime hours	3.6	3.9	3.9	3.9	3.5	3.7	3.6	3.8	3.8	3.7
Food and kindred products	40.3	40.7	40.8	41.3	39.8	40.3	40.2	40.5	40.6	40.8
Tobacco manufactures	37.4	41.2	41.2	41.2	(2)	(2)	(2)	(2)	(2)	(2)
Textile mill products	42.2	42.2	42.2	42.3	41.6	42.1	41.3	41.9	41.8	41.7
Apparel and other textile products	37.4	37.5	37.4	37.8	37.0	37.4	36.3	37.4	37.1	37.4
Paper and allied products	44.1	43.7	43.6	44.1	43.2	43.4	43.8	43.7	43.4	43.2
Printing and publishing	38.7	38.1	38.3	38.7	38.0	37.9	38.2	38.0	38.0	37.9
Chemicals and allied products	42.6	42.4	42.7	43.0	42.1	42.4	42.8	42.7	42.6	42.5
Petroleum and coal products	43.6	43.8	43.7	43.9	43.6	43.3	43.2	43.5	43.5	43.9
Rubber and miscellaneous plastics products	42.3	41.9	42.1	42.5	(2)	(2)	(2)	(2)	(2)	(2)
Leather and leather products	38.1	38.7	38.5	38.9	(2)	(2)	(2)	(2)	(2)	(2)
Transportation and public utilities	39.1	39.3	39.3	39.1	38.9	39.3	39.1	39.3	39.2	38.9
Wholesale trade	38.4	38.4	38.3	38.4	38.2	38.3	38.0	38.4	38.3	38.2
Retail trade	29.4	29.2	29.0	29.3	28.9	29.6	29.6	29.3	29.2	28.8
Finance, insurance, and real estate	36.5	36.2	36.4	36.1	(2)	(2)	(2)	(2)	(2)	(2)
Services	32.4	32.5	32.5	32.5	32.4	32.5	32.5	32.5	32.6	32.5

[1] Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately four-fifths of the total employees on private nonagricultural payrolls.

[2] This series is not published seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

p = preliminary.

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ESTABLISHMENT DATA

Table B-3. Average hourly and weekly earnings of production or nonsupervisory workers[1] on private nonagricultural payrolls by industry

Industry	Average hourly earnings				Average weekly earnings			
	Dec. 1986	Oct. 1987	Nov. 1987 p	Dec. 1987 p	Dec. 1986	Oct. 1987	Nov. 1987 p	Dec. 1987 p
Total private	$8.84	$9.09	$9.14	$9.13	$308.33	$317.24	$318.07	$318.64
Seasonally adjusted	8.84	9.08	9.13	9.11	305.86	316.89	318.64	316.12
Mining	12.63	12.34	12.46	12.46	535.51	524.92	529.55	531.29
Construction	12.77	12.79	12.81	12.81	469.94	496.25	475.25	484.22
Manufacturing	9.85	9.95	10.01	10.08	408.78	410.94	414.41	422.35
Durable goods	10.40	10.51	10.57	10.64	439.92	439.32	443.94	452.20
Lumber and wood products	8.32	8.44	8.48	8.45	337.79	342.66	342.59	343.92
Furniture and fixtures	7.65	7.73	7.74	7.79	314.42	313.84	312.70	318.61
Stone, clay, and glass products	10.17	10.31	10.34	10.34	427.14	443.33	437.38	437.38
Primary metal industries	11.82	12.05	12.08	12.15	508.26	522.97	527.90	535.82
Blast furnaces and basic steel products	13.74	13.97	13.97	14.04	589.45	610.49	610.49	621.38
Fabricated metal products	10.02	10.11	10.15	10.23	422.84	424.62	424.33	436.82
Machinery, except electrical	10.67	10.86	10.89	10.97	456.68	460.46	467.18	478.29
Electrical and electronic equipment	9.82	9.95	10.01	10.09	413.42	408.95	414.41	424.79
Transportation equipment	12.96	13.09	13.18	13.26	562.46	553.71	561.47	567.53
Motor vehicles and equipment	13.56	13.73	13.81	13.91	595.28	586.27	593.83	596.74
Instruments and related products	9.65	9.81	9.90	9.99	407.23	410.06	416.79	433.57
Miscellaneous manufacturing	7.69	7.77	7.81	7.89	309.14	310.80	309.28	316.39
Nondurable goods	9.07	9.18	9.24	9.30	368.24	371.79	375.14	381.30
Food and kindred products	8.88	8.86	8.97	9.07	357.86	360.60	365.98	374.59
Tobacco manufactures	12.93	12.77	13.59	13.58	483.58	526.12	559.91	559.50
Textile mill products	7.10	7.24	7.31	7.31	299.62	305.53	308.48	309.21
Apparel and other textile products	5.90	5.99	5.99	6.02	220.66	224.63	224.03	227.56
Paper and allied products	11.34	11.48	11.49	11.58	500.09	501.68	500.96	510.68
Printing and publishing	10.15	10.42	10.40	10.44	392.81	397.00	398.72	404.03
Chemicals and allied products	12.20	12.52	12.58	12.61	519.72	530.85	537.17	542.23
Petroleum and coal products	14.41	14.66	14.72	14.72	628.28	642.11	643.26	646.21
Rubber and miscellaneous plastics products	8.82	8.91	8.95	9.02	373.09	379.33	375.95	383.35
Leather and leather products	5.98	6.09	6.11	6.14	227.84	235.68	235.24	238.85
Transportation and public utilities	11.90	12.09	12.19	12.16	465.29	475.14	479.07	475.46
Wholesale trade	9.47	9.67	9.75	9.75	363.65	371.33	373.43	374.40
Retail trade	6.07	6.16	6.19	6.17	178.46	179.87	179.51	180.78
Finance, insurance, and real estate	8.48	8.81	8.92	8.85	309.52	318.92	324.69	319.49
Services	8.32	8.61	8.70	8.72	269.57	279.83	282.75	283.40

[1] See footnote 1, table B-2.
p = preliminary.

NOTE: Corrected average hourly and weekly earnings data for transportation and public utilities in August 1987 are $12.04 and $479.78, respectively; for September, $12.09 and $473.83, respectively.

Table B-4. Hourly Earnings Index for production or nonsupervisory workers[1] on private nonagricultural payrolls by industry

(1977 = 100)

Industry	Not seasonally adjusted					Seasonally adjusted						
	Dec. 1986	Oct. 1987	Nov. 1987p	Dec. 1987p	Percent change from: Dec. 1986–Dec. 1987	Dec. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987p	Dec. 1987p	Percent change from: Nov. 1987–Dec. 1987
Total private nonfarm:												
Current dollars	171.6	174.9	176.0	176.2	2.7	171.1	174.1	174.6	174.9	175.8	175.6	-0.1
Constant (1977) dollars	95.6	93.4	93.9	N.A.	(2)	95.3	93.7	93.8	93.7	93.8	N.A.	(3)
Mining	182.7	182.1	184.1	184.0	-.7	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Construction	155.1	156.3	156.2	155.8	-.3	154.3	154.7	154.0	154.7	156.7	154.7	-1.3
Manufacturing	171.7	175.7	176.5	177.4	2.1	173.4	175.5	176.7	176.3	176.7	177.0	.2
Transportation and public utilities	174.7	177.3	178.6	178.6	2.2	173.5	177.0	176.6	176.9	177.3	177.3	(5)
Wholesale trade	174.8	178.5	179.7	179.8	2.9	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Retail trade	159.2	161.9	162.3	161.9	1.8	159.3	161.5	162.7	162.2	162.3	162.1	-.1
Finance, insurance, and real estate	182.4	189.4	191.8	190.7	4.6	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Services	177.5	183.9	185.7	186.0	4.8	179.6	182.4	182.3	183.9	185.1	184.9	-.1

[1] See footnote 1, table B-2.
[2] Change is -1.9 from November 1986 to November 1987, the latest month available.
[3] Change is .2 from October 1987 to November 1987, the latest month available.
[4] These series are not seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.
[5] Change is less than .05 percent.
p = preliminary.
N.A. = not available.

NOTE: Seasonally adjusted August and September 1987 indexes for transportation and public utilities have been corrected. Corrected not seasonally adjusted indexes are 178.1 and 177.1, respectively.

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Table B-5. Indexes of aggregate weekly hours of production or nonsupervisory workers[1] on private nonagricultural payrolls by industry

(1977 = 100)

Industry	Not seasonally adjusted				Seasonally adjusted					
	Dec. 1986	Oct. 1987	Nov. 1987 p	Dec. 1987 p	Dec. 1986	Aug. 1987	Sept. 1987	Oct. 1987	Nov. 1987 p	Dec. 1987 p
Total	119.5	123.0	122.8	123.6	117.9	121.2	120.4	121.9	122.2	122.0
Goods-producing	98.6	103.6	102.4	102.8	97.8	99.7	97.7	101.3	101.5	101.0
Mining	81.2	88.2	87.9	88.5	79.5	85.2	84.9	87.7	86.8	86.6
Construction	128.6	147.8	137.2	134.7	130.7	133.6	124.9	136.8	136.2	139.5
Manufacturing	94.1	95.8	96.4	97.4	92.3	93.8	93.1	95.0	95.4	95.5
Durable goods	91.8	93.0	93.8	95.1	89.8	91.2	90.1	92.6	93.0	92.9
Lumber and wood products	99.1	104.4	103.1	102.8	101.0	101.2	99.2	101.7	104.2	104.6
Furniture and fixtures	111.1	115.4	115.5	117.3	106.5	111.7	109.7	112.7	113.0	112.7
Stone, clay, and glass products	86.7	90.3	88.6	86.8	86.5	86.1	85.9	87.7	88.1	88.0
Primary metal industries	61.5	65.9	66.7	67.7	61.1	65.0	65.9	66.8	67.1	67.1
Blast furnaces and basic steel products	47.1	53.3	53.8	55.1	46.9	53.0	55.2	54.9	54.8	54.9
Fabricated metal products	90.8	91.9	93.0	94.3	88.3	89.4	88.2	91.3	92.0	91.7
Machinery, except electrical	86.3	88.6	90.2	92.7	83.8	87.4	86.7	89.3	90.0	90.1
Electrical and electronic equipment	104.3	102.3	103.9	106.4	101.5	100.8	99.3	102.0	102.3	103.4
Transportation equipment	101.5	97.3	98.6	99.4	97.2	97.4	95.2	97.8	97.5	95.0
Motor vehicles and equipment	91.1	86.5	87.6	87.7	86.3	86.1	83.3	86.9	86.7	83.0
Instruments and related products	105.1	103.9	106.2	109.4	102.1	103.0	102.1	105.1	105.2	106.4
Miscellaneous manufacturing	82.2	86.5	86.0	84.2	81.0	82.3	80.7	82.7	82.5	82.9
Nondurable goods	97.3	100.0	100.2	100.8	96.0	97.7	97.4	98.7	99.0	99.4
Food and kindred products	99.1	104.5	103.1	102.2	98.5	99.5	99.1	100.3	101.3	101.7
Tobacco manufactures	81.3	85.0	82.0	80.6	75.9	71.0	72.4	73.8	75.8	76.0
Textile mill products	82.1	84.8	84.9	84.9	80.8	83.7	82.4	83.7	83.8	83.6
Apparel and other textile products	86.9	89.1	88.9	89.1	86.3	86.6	86.8	87.8	87.6	88.3
Paper and allied products	102.6	101.4	101.9	103.5	100.5	100.4	101.9	101.3	101.0	101.5
Printing and publishing	132.8	132.7	134.5	137.2	129.4	131.4	132.6	132.3	133.0	133.1
Chemicals and allied products	93.4	95.4	96.6	97.8	92.7	95.5	96.4	96.3	96.8	97.0
Petroleum and coal products	79.3	85.4	84.7	83.8	81.6	83.4	83.2	84.5	86.5	86.1
Rubber and miscellaneous plastics products	114.6	118.9	120.2	122.2	112.7	115.5	115.5	118.4	119.5	120.0
Leather and leather products	57.8	62.1	62.0	62.6	56.7	61.4	60.0	61.1	60.5	61.3
Service-producing	131.0	133.7	134.0	135.1	129.0	133.1	132.9	133.3	133.6	133.0
Transportation and public utilities	107.9	111.8	111.8	111.5	106.5	109.7	109.9	110.9	111.0	109.7
Wholesale trade	117.3	119.6	119.4	119.9	116.4	118.2	117.3	118.8	118.9	118.9
Retail trade	124.4	121.7	122.9	126.5	118.0	122.4	122.5	121.9	121.5	119.9
Finance, insurance, and real estate	140.0	141.8	142.5	141.7	139.8	143.0	141.4	142.2	143.4	141.4
Services	147.1	154.3	154.2	154.1	147.8	152.9	152.9	153.5	154.4	155.0

[1] See footnote 1, table B-2.

p = preliminary.

Table B-6. Indexes of diffusion: Percent of industries in which employment[1] increased

Time span	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span	1985	55.9	47.0	52.4	47.3	53.2	46.8	53.8	53.8	47.8	53.2	56.3	57.3
	1986	53.2	48.1	48.1	53.5	52.4	46.8	52.4	56.2	55.1	53.2	59.7	59.7
	1987	53.5	56.8	58.6	58.4	58.6	55.7	68.6	54.6	65.4	65.4	p70.5	p62.4
Over 3-month span	1985	51.1	48.4	42.4	46.5	44.3	49.7	47.0	48.6	45.9	47.6	55.1	56.5
	1986	49.7	44.9	45.7	48.4	47.6	45.4	48.4	55.1	55.9	58.1	58.6	60.3
	1987	58.6	59.5	61.1	61.6	61.4	67.3	66.2	75.1	69.7	p78.4	p75.4	
Over 6-month span	1985	46.5	46.5	43.2	44.3	44.3	45.1	43.0	44.3	49.2	49.2	47.3	45.9
	1986	47.6	47.6	43.0	41.2	45.4	48.4	47.3	53.0	59.2	58.9	57.8	58.9
	1987	61.9	62.7	58.9	67.3	67.6	71.1	76.2	p80.3	p80.3			
Over 12-month span	1985	44.6	44.1	43.8	40.8	41.6	41.6	42.2	42.4	43.8	44.3	44.1	42.4
	1986	43.2	44.1	46.2	45.7	47.8	49.5	49.5	51.6	54.9	52.2	53.1	56.5
	1987	62.2	63.5	67.3	68.9	p72.4	p73.0						

[1] Number of employees, seasonally adjusted for 1, 3, and 6 month spans, on payrolls of 185 private nonagricultural industries. Data for the 12-month span are unadjusted.

p = preliminary

NOTE: Figures are the percent of industries with employment rising. (Half of the unchanged components are counted as rising.) Data are centered within the spans.

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Senator PROXMIRE. Now, would you like, Mrs. Norwood, to take a stab at my question, which is that you concluded on a very encouraging note—and, of course, the data are very encouraging—why? Is there anything that the Congress has done right or that the administration has done right as far as unemployment is concerned that has had an effect in the last year?

We not only have had declining unemployment, but the level is good. Any time the unemployment in this country, it seems to me, is below 6.5 percent or so, it is good, and it is below 6 percent now.

Mrs. NORWOOD. I think several developments have occurred in the economy.

First, we have had during recent years a fairly consistent defense buildup, which has provided jobs. I don't think there is any doubt about that.

We have had in many ways rather expansionary policies. You know, I recently, a few weeks ago, was at the convention of the American Economic Association, where a lot of very prominent economists were discussing the question of deficits and what——

Senator PROXMIRE. Including President Eisner.

Mrs. NORWOOD. Yes.

Senator PROXMIRE. Especially President Eisner.

Mrs. NORWOOD. That was the session that I was referring to.

I think there is a great deal of concern among economists, but, nevertheless, it also seems true that over the last several years, some of our spending policies, we have had an effect on the labor market.

Senator PROXMIRE. You are a great diplomat. What you are really saying, as I understand it—and I think that this is the case—that when you run huge deficits, massive deficits, 1982, 1983, 1984, 1985, and 1986, it should be no surprise that unemployment is going to fall. The most dramatic example of that was when we ran the colossal deficits in World War II and unemployment came down from about 17 percent in 1940 to 2 percent in 1945, so that the benefit of a deficit, of a series of deficits is that unemployment, at least in the short run, declines.

But that enormous, enormous, colossal debt we build up means it is going to be much more difficult, it seems to me, in the future to maintain that, particularly if we do what Congress has promised to do in the Gramm-Rudman-Hollings bill, which I supported and which I think is right, which is to diminish the deficit, cut it down, and when we do that it seems to me that we are going to be confronted with a situation that is likely to have a reverse effect on unemployment. In other words, unemployment is likely to increase.

Isn't that correct?

Mrs. NORWOOD. In addition, of course, American consumers have over the last several years been spending at a very high rate. Many economists and many forecasters are suggesting that situation may change, partly as a result of the stock market declines.

There is no evidence of that yet, but certainly the extent of consumer purchases, or perhaps the converse of that, the very small rate of consumer savings in this country, has also helped to expand production.

Senator PROXMIRE. I am glad you mention that because we have focused all of our attention—I mean all of it—on the Federal defi-

cit, which is a real problem. But there has been very little attention focused on the fact that we have a colossal increase in debt in the household sector.

Federal debt is $2.35 trillion, household sector about $2.8 trillion, business sector over $3 trillion, and all three of those together add up to well over $8 trillion and constitute, it seems to me, a colossal burden. People not only have to pay for the interest on the national debt, they have to pay interest on their mortgages. Businesses have to pay a colossal interest on their borrowing.

Back in 1955 we had $2.85 of debt for every dollar of earnings. Today we have over $9 of debt for every dollar of earnings. That means, of course, that much of the cash-flow that used to go to research and development and other, manpower training and buying new equipment, has to go to just paying interest on the debt.

So this is a comprehensive economic problem covering our whole economy.

Mrs. NORWOOD. One of the elements that I think supports some of that view is the fact that the labor market now has so many two-earner families. The one-earner family is a minority today except, of course, for the group of women maintaining families, who have very great difficulty. Most husband-wife families have two earners in the household. I think that partly as a result of that, their standards of living and their whole attitude about purchases and about the kinds of houses they live in, the kinds of cars they buy, and so on, is based upon the assumption of having not one income but two incomes. So, our standards of living are, or at least our aspirations for higher standards of living, increasing.

Senator PROXMIRE. Still you have a situation where the combination of government living beyond our means, households living beyond their means, and businesses living beyond their means, together, in aggregate, adds up to a situation which seems to me indicates we are likely to have trouble in the future.

Now, let me ask you about the fact that in November, as I recall, leading economic indicators dropped by a record amount, 1.7 percent, which was an astonishingly big drop, the leading indicators indicating the kind of economy we are likely to have in the future.

As I think you would agree, unemployment is a lagging indicator. It follows the fact that unemployment has been performing so well is partly because we were running big deficits in 1986, we were running a very easy monetary policy in much of 1986, and, of course, it has come in, therefore, with a diminution in unemployment.

Now, we have begun to some extent to reverse that. We had a spectacular drop in the deficit in 1987, and money had been much tighter in the last 6 months, and it seems that the consumer is unable to keep borrowing and spending very much longer at this kind of level.

So it would seem to me that the outlook may not be quite as good as the immediate figures that you have given to us this morning suggest as far as unemployment is concerned.

Mrs. NORWOOD. Of course, one of the major reasons for the drop in the leading indicators was the stock market decline.

Senator PROXMIRE. Yes, that was the leading reason, but 9 out of the 10 indicators fell.

Mrs. NORWOOD. But that had the biggest effect, I believe.

Senator PROXMIRE. That had by far the biggest. About two-thirds of the total effect was because of that.

Mrs. NORWOOD. I think one of the important elements in all of this, Senator, is the foreign debt and the future of the value of the dollar, which we don't know very much about. I think that is an extremely important element because we are rather dependent upon foreign investment in this country. So if the dollar continues to fall, we may have some difficulties.

Senator PROXMIRE. Now, on a seasonally adjusted basis the initial claims for unemployment insurance rose in November and December after hitting bottom in October.

Could that be a sign of a rise in the unemployment rate, or is there some other explanation—future rise?

Mrs. NORWOOD. I don't really see the UI data as an indicator of what is going to happen. First of all, as we have discussed before, a relatively small portion of the people who are unemployed are now getting UI benefits. The data also, as I have said many times, need to be looked at over much longer periods of time.

Senator PROXMIRE. I am glad to get that explanation because it follows what I understand, that only one-third of the unemployed are currently covered by unemployment insurance.

But to what extent does this reflect a change in work, with more people working at home or as independent contractors? Does it reflect that primarily?

Mrs. NORWOOD. It reflects a number of things. First, there has been some tightening of requirements for eligibility for unemployment insurance by law.

Second, there also has been some tightening of requirements through administrative action.

Third, we had two back-to-back recessions, one of them quite steep in 1981–82, and a lot of people used up their benefits. A number of manufacturing industries have been restructured. Though we are gaining jobs in manufacturing, we have regained less than 60 percent of what we lost during the last recession.

Senator PROXMIRE. You are only back to 60 percent of what we had in 1981 in manufacturing jobs?

Mrs. NORWOOD. Yes, that is right.

Senator PROXMIRE. I didn't understand. That is an astonishing figure.

Mrs. NORWOOD. Now, remember that output has not declined so much. What we are seeing is a restructuring; we are seeing greater efficiency. Some of the more inefficient plants have been taken out of production.

Senator PROXMIRE. Well, that productivity has slowed down in the last year or so, hasn't it?

Mrs. NORWOOD. Yes, it has slowed down, but it is still quite high in manufacturing.

Senator PROXMIRE. If the economy goes into a recession and unemployment rises sharply as it did in the 1981–82 recession, what percentage of the job losers will be covered by unemployment insurance?

Mrs. NORWOOD. All I can do is look back to 1981. It was higher certainly. In April 1981, for example, close to 45 percent of the un-

employed were covered. But I don't think that it will go back to the 1975 level of coverage, which was about two-thirds.

Senator PROXMIRE. So you think it will go back how far, you say?

Mrs. NORWOOD. Pardon me.

Senator PROXMIRE. You say in the event of a recession the proportion of unemployed workers who would be covered would be how high?

Mrs. NORWOOD. If you take the total unemployed as we measure them in the Current Population Survey, I would guess about—somewhere around 45 to 50 percent might be covered. If you look just at the people who have lost their jobs, job losers, then it might be considerably higher. It might be as much as 80 percent.

Senator PROXMIRE. Well, that is what puzzles me. In November almost 70 percent of the workers who lost their jobs—who were unemployed were not covered, 28.6 percent received unemployment benefits. Last March the figure was much higher, 37 percent.

Do you have the data for December? Can you explain why the percentage of unemployed workers receiving benefits fell so sharply over that 8-month period?

This is a tough human problem, it seems to me. We always think of people unemployed getting unemployment benefits for a while, but now it looks as if that is getting more fragile and less supportive.

Mrs. NORWOOD. You have to remember that over the last year more than 2 million people entered the labor force. Most of those people would not have unemployment insurance coverage.

Second, the number of people who leave their last job voluntarily always increases during a period of economic expansion. About 15 percent or so of the people who are now unemployed are job leavers.

The number of job losers; that is, people who lost their job, has declined during the expansion. There is still a sizable number of them, but they are not as large a share of the total unemployed.

Senator PROXMIRE. The President is currently working on his budget submission for fiscal 1989.

What budget changes are being proposed for the Bureau of Labor Statistics, and what effect will the proposed changes have on your operations? Are there any operations that will be seriously cut back?

Mrs. NORWOOD. Yes. I can't address fiscal 1989, but I can tell you about fiscal 1988.

As you know, there is an across-the-board cut of 4.26 percent. For the Bureau of Labor Statistics that is a little more than $10 million.

In addition to that, our concern is that we understand that the Congress also reduced the travel fund for three departments, and the Labor Department is one of those. We have not yet been informed of what portion of that cut will be allocated to the Bureau of Labor Statistics. It could be as high as 20 percent of our travel budget.

More than 90 percent of all of our travel is to collect data, train data collectors, or provide technical assistance to the States who act as our data collectors. What we have been doing over the past couple of weeks is looking at each of our programs to try to figure

out how we can take the cuts for fiscal 1988 in a way that will preserve the quality of as much of the important data that we produce as we can.

As you know, the early 1980's especially in 1982, we took cuts by eliminating a lot of programs that were pretty much around the periphery. They were good things to have, and I still get complaints from people because we have cut them out, but what we tried to do was to preserve the basic core of data. Now, we are getting into the core.

The kinds of things we are looking—and we have not made the decisions yet because we have to see how the travel fits into this—but it looks like we may have to make reductions in samples.

We are looking at reducing some of the samples of the Consumer Price Index in about 10 areas.

We are looking at reduction of detail in the Producer Price Index.

We are looking at some reductions in the International Price Program; that is, export-import prices, but we are very concerned about that program because its samples are already too small since trade has expanded so much.

In the employment area, we are trying to protect the national employment and unemployment data, which means that the only alternative then is to reduce the amount of detail for local areas, for States in the Monthly Establishment Program and probably for Los Angeles and New York City in the Current Population Survey, which currently have special treatment. We will be maintaining the data and the quality of the data at the national level.

We are looking at an elimination of one of our wage indexes and at reducing detail in some of the other wage programs.

We will have a better idea when we know the exact amount of the travel cut because we really think we are going to have to go back and redo much of the review of these cuts when we find that out.

Senator PROXMIRE. Let me ask you——

Mrs. NORWOOD. I, of course, hope that it will be decided that since the Labor Department has so many enforcement activities and data collection activities which require travel, that it will not get a proportional amount of that cut, but we haven't yet been informed by OMB what that decision is.

Senator PROXMIRE. Let me ask you a little bit about this. This is the inflation I showed you before, with inflation rising from 1.1 percent last year to an end-of-the-year figure of 4.5 percent, at least in November.

Now, the latest real earnings release shows that average hourly earnings for nonsupervisory workers rose 2.9 percent in the last year and average weekly hours rose 0.3 percent, so that workers on average are currently earning 3.2 percent more than they did a year ago.

But the CPI rose 4.6 percent in the same period, leaving workers 1.3 percent worse off. That means that if a family had $20,000 of income they took a $260 hit net. They got an increase in their pay, but the inflation outpaced that, and as a result they are worse off by $260.

Why have the earnings of production workers failed to keep pace with inflation during the last year?

Mrs. NORWOOD. What we are seeing is declining rates of wage increases, particularly in those industries which are being restructured. We are seeing increases in services. For example, over the last year the service industries in our Employment Cost Index had an increase in total compensation—benefits as well as salaries and wages—of 4.8 percent; whereas, in manufacturing the increase was only 2.6 percent.

You are correct, of course, that as inflation increases the value of these wage and benefit increases is diminished considerably, but I think there is a differential here between what is happening in services and what is happening in manufacturing.

Senator PROXMIRE. There is also a terrific geographic difference.

Mrs. NORWOOD. Yes.

Senator PROXMIRE. I was up in Hartford earlier this week, and I talked with a man who has a large retail operation, and I asked him how he was doing on hiring employees. He had lived in the Washington area before. And he said, "well, the trouble up here is you can't get anybody to work." He said, "there is nobody there."

And I noticed that the McDonald's in Boston is paying people now $7 an hour; $7 an hour isn't great pay, but for a minimum wage job like a McDonald's worker it is astonishing.

Now, in those areas workers are doing pretty well, I presume, because they are being paid more, but in many other areas—Wisconsin is probably average and Oklahoma, Louisiana, Texas are probably in bad shape—there really is a great deal of suffering and incomes, net incomes, I imagine have dropped sharply.

Can you give us a little notion of how this varies by region of the country?

Mrs. NORWOOD. It is clear that the Northeastern region is doing quite well and that in order to get workers many employers, particularly in retail trade, restaurants, and smaller establishments are having to raise wages considerably.

In the South and Middle Western areas that is not the case.

Unemployment seems to be getting restructured throughout the country, in part because of the kinds of industries that are developed and that are already geographically present. For example, during the recession, we had a band of very high-unemployment States going right down the center of the country from the Great Lakes all the way down into the South. That is no longer true. Now, some of the unemployment has moved to Alaska and some of the oil-producing areas in the South and in the West. Of course we have the farm area problem as well.

So I think, there are shifts that are going on. There are also many fewer young people. We are finding a good many complaints from industries that hire summer youth—resort areas, for example. There are just fewer teenagers around for them to hire.

Senator PROXMIRE. The Bureau of Labor Statistics' third quarter report on the employment of minority workers starts with the following sentence:

"Black men were far more likely than white or Hispanic origin men to have spent all of 1986 without any employment."

What percentage of each group did not work at all in 1986—black, Hispanic, and white?

Mrs. NORWOOD. We will have to supply that for the record.

Employment and labor force for the black population has increased over the last year. These increases, however, are not evenly distributed among the black population.

But we can provide the specifics of that release.

[The following information was subsequently supplied for the record:]

Nonwork rates* for whites, blacks, and Hispanics, by sex, 1986.

	Men	Women
White	20.1	39.7
Black	30.0	41.5
Hispanic	18.8	46.0

*Proportion of population with no work experience during calendar year 1986.

Note--Differences between demographic groups reflect not only age-specific differences in nonwork rates, but also, differences in the age profile of each group.

Mr. PLEWES. In the figures I see before me, the percent of persons who had unemployment during the year 1986, for whites was 15 percent, for blacks was 25 percent, and for those with Hispanic origin was 22.3 percent.

Senator PROXMIRE. These are the percentage that didn't work at all?

Mr. PLEWES. These are the percentage who had some unemployment. I would have to calculate the percentage who didn't work at all. I don't have that figure before me, sir.

I have some numbers——

Senator PROXMIRE. It is appalling. That is real depression level.

Mr. PLEWES. I have some numbers, but not——

Senator PROXMIRE. I mean, that is a terrible economic problem for the country.

Mrs. NORWOOD. But that is a spell of unemployment.

Senator PROXMIRE. What is that?

Mrs. NORWOOD. The data that he is giving you are for a spell of unemployment. That does not necessarily mean that they are unemployed all year long.

Senator PROXMIRE. Well, but he is saying that 25 percent at any one time of the black men are unemployed.

Mr. PLEWES. That is not quite correct. What the figures say is that roughly one-fourth of the blacks were unemployed at sometime during the year.

Senator PROXMIRE. Those were the figures you had in 1933 for the whole economy and we had the worst depression in our history.

Mrs. NORWOOD. We had a much smaller labor force and population.

Senator PROXMIRE. Well, that is true.

The employment-population ratio for black teenagers fell from a peak of 31.2 percent in August to 29.1 percent in December while their unemployment rate rose from 30.6 to 33.4 percent.

Can you explain why the job market has deteriorated for black teenagers?

You just pointed out that there is a need for young people and they are looking for young people to work, and here you have a situation where black teenagers just aren't getting the jobs. Is this a matter of racism? What is it?

Mrs. NORWOOD. A lot of reasons probably. One is that they are not located in the areas where the jobs are, and they often don't have the transportation to get there.

Another is clearly the kind of conditions that some of our central city people live in. Many of the black teenagers are members of families maintained by women. One out of every three of them lives in poverty. They grow up, I think, with very little hope and very little understanding of the world of work that is out there, partly because of the education they get and partly because of the circumstances in which they live.

Senator PROXMIRE. I think those are all facts that undoubtedly are true, but is there any way you can measure the discrimination?

I just have a feeling that there is a tendency on the part of white employers to hire white youngsters instead of black youngsters. After all, most of the employers are white. They make the decision.

Mrs. NORWOOD. We have no evidence.

Senator PROXMIRE. There is no evidence of that?

Mrs. NORWOOD. No specific evidence that I can point to of discrimination.

Senator PROXMIRE. Last year the civilian unemployment rate declined significantly during the first half, from 6.7 percent in January to 6 percent in July. Since then it has leveled off and hasn't declined very much.

Does that suggest the economy has hit a plateau and that the unemployment figure is likely to flatten out at that level?

Mrs. NORWOOD. The economy is generating and has been for the last half year just enough jobs to take account of the increase in the labor force. We are lucky, I think, that the labor force is projected to slow down its growth, but we do need continued growth just to keep up with the labor force itself.

I have, by the way, brought for you a preliminary copy of our charting of our projections to the year 2000. It is a unique publication for us. We are very proud of it, and I thought you would like to have a copy of it.

Senator PROXMIRE. I am delighted to have it, and I will to happy to study it.

One of the indications of economic distress is the people that have jobs and are counted as employed, but only have part-time jobs and they are only part time for economic reasons. They can't get any better, and therefore they work 10 hours, 15 hours, or 20 hours a week.

Now, although unemployment fell by 940,000 in 1987, there was practically no real reduction in the number of people working part time for economic reasons. That puzzles me.

Why? If the economy is growing and creating jobs, why then are people having difficulty finding full-time work? Does that suggest that a larger then normal proportion of the new jobs are part-time jobs?

Mrs. NORWOOD. The data suggest that most of the jobs that are created are full-time jobs. We do have almost 15 million people who work part time because that is what they want to do. There are, of course, a lot of service industries which, in part, because of the two-earner family, have extended their working hours and are hiring additional people for shorter worktime.

We should remember that some of that 5.3 million people who are part time for economic reasons are working, oh, say, 30 or 32 hours, so that it is not a completely half-time kind of situation. But it is clear that is a high number. It has come down enormously——

Senator PROXMIRE. And you have characterized that as part time for economic reasons. In other words, they haven't chosen to work—a lot of people would choose to work 20 hours. Maybe they are in a family and they have children to take care of and one of the members of the family has to stay home.

Mrs. NORWOOD. That is right.

Senator PROXMIRE. They only want to work 20 hours a week. They are not counted as part time for economic reasons, I understand?

Mrs. NORWOOD. No, that is the almost 15 million who want to work——

Senator PROXMIRE. It is only if they want a full-time job, they need a full-time job, but all they can get is something that employs them for a lot less than that?

Mrs. NORWOOD. That is right.

Some of them, of course, have jobs and rather than being laid off, their shift is reduced from, say, 5 days to 4 days or something of that sort. There are a number of different arrangements that are made.

But you are quite right, that is a high number.

Senator PROXMIRE. Let me get back again to this chart here. It compares the CPI for each month in 1987 with the same month a year earlier.

This is the one for that?

Mrs. NORWOOD. Yes.

Senator PROXMIRE. A steady rise in the inflation rate throughout 1987.

What explains that increase in inflation, and do you see any reason under current circumstances why the inflation rate should not continue to increase as it did through 1987?

Mrs. NORWOOD. The major reason is the increase in oil prices, and the major reason for the decline in the rate of inflation in preceding years was the decrease in oil prices.

Senator PROXMIRE. Well, that is the major reason, but it is certainly not the only reason; is it?

Mrs. NORWOOD. No; it is not the only reason, but it has had an enormous effect.

Senator PROXMIRE. Certainly another reason, and another reason that, as I see it, would be likely to persist, is something you mentioned earlier, which is the decline in the value of the dollar. As we have to pay more for imports—that means that we buy cars, TV sets, almost anything—you have to pay more for it.

Furthermore, the competition in this country will be less, and therefore there will be more of a tendency for business in this country to increase their prices because the foreign competition isn't nearly as tough.

Mrs. NORWOOD. Yes, I think imports have had an impact, but I think that if we are looking toward the future, we have to look at several things.

One is what is going to happen to oil prices. The OPEC countries do not seem at the moment to have been able to reduce production and raise prices. We don't know what will happen in the future. There are some suggestions that might turn around. That is something we have to watch out for.

Clearly, imports are an important factor. As you know, our data suggest that for some countries whose currencies are tied to the dollar, like Korea, Taiwan, and Hong Kong, there has not been a very large effect from the drop in the value of the dollar, but for other countries like Japan the difference has been very large. But the foreign exporter to the American market has tended to absorb a good part of that drop in the value of the dollar.

I think that suggests that in the future it is going to be much more difficult for them to hold down export prices to this market, and therefore there should be some upward pressure on them.

Now, as they go up in price, of course, we would expect that American consumers would reduce their purchases of those goods.

Senator PROXMIRE. Let me ask you about another budget question that affects you but also affects the elderly in this country. The CPI for the elderly. The Older American Act amendments requires BLS to produce a test CPI for the elderly within 180 days.

Do you have the resources, do you have the budget, do you have the money to carry that out, and how accurately will this test CPI/E reflect the crisis facing the elderly?

Mrs. NORWOOD. It is a requirement of law. We will carry it out. We will do it, as we explained to the Congress, by reweighting existing data. We don't think that a reweighting of existing data will provide a very accurate picture of the difference between the elderly and the general population, but we have been instructed to do that and we will do it.

I believe that work is underway.

Senator PROXMIRE. Mr. Dalton.

Mr. DALTON. We are in fact looking at the question that you have posed in light of the budget reductions, and we haven't come to a conclusion yet, but it is possible that we might ask for an extension of time.

Senator PROXMIRE. I am sorry, I missed the last part of that.

Mr. DALTON. We haven't come to a determination yet, but it may be possible that we ask for an extension in time to provide that information.

Senator PROXMIRE. OK.

I have just one more question, and it relates to employment in manufacturing.

During 1987, payroll employment in manufacturing grew by more than 400,000.

Was that employment growth located primarily in industries that have been made more competitive by the declining dollar, or has the increase been widespread and unrelated to the dollar?

Mrs. NORWOOD. There has been an increase in employment over the year in a number of the industries, including machinery, steel, furniture, lumber and wood, paper, and rubber——

Senator PROXMIRE. Are those strong export industries?

Mrs. NORWOOD [continuing]. Which are export related.

Senator PROXMIRE. They are export related.

Mrs. NORWOOD. I believe a lot of it is export related, very clearly.

Senator PROXMIRE. I do have one more question. It refers to the good old Diffusion Index. That indicates that two-thirds to three-quarters of all the industries have been expanding employment. It has been across the board.

Is that an unusually high number, and how much of it is due to the strengthening of employment in manufacturing?

Mrs. NORWOOD. It is unusually high number, and a lot of it is due to the strengthening of manufacturing. We are experimenting with a Diffusion Index that would have more service industries in it, since the economy is becoming more service oriented. There has been a little dampening in the second index, but not a great deal. They are both showing considerable employment increase.

Senator PROXMIRE. Madam Commissioner, I want to thank you.

Let the record show that this is your 101st time you have testified before the Joint Economic Committee on the unemployment figures, and you have always done a superlative job. I don't know of anybody in this administration or any administration that has done that so consistently, certainly so well, and testified so often in spite of abrasive and maybe distasteful questions. [Laughter.]

This is the 70th time since 1971 that I have chaired the hearings on unemployment, since we started them in the Nixon administration, the administration denied the person who occupied your position the right to have a press conference to announce the figures, and so we have had you up ever since then, and I must say it is a great pleasure and honor to have an opportunity to interrogate you and you always do a great job.

Thank you very much.

Mrs. NORWOOD. Thank you very much. It is a great pleasure for us to be here.

Senator PROXMIRE. The committee will stand adjourned.

[Whereupon, at 10:20 a.m., the committee adjourned, subject to the call of the Chair.]

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